

# FIRE AND SECURITY PRODUCTS

ISSUE 29

[www.espuk.com](http://www.espuk.com)





## About ESP\*

For more than 20 years ESP\* has been developing and supplying security related products to the UK electrical industry. As a leading safety and security product specialist, the company offers a comprehensive range of electronic security and fire detection solutions to meet the requirements of installers and contractors. The range includes Smart Security, CCTV, Access Control, a growing collection of Two Wire, Conventional and Addressable Fire Protection products, Ducer Emergency Lighting, Essentials, and Sangamo Time Switches and Heating Controls.

## Central Location – England

Based in Worcestershire in the Midlands at our purpose built Head Office and Distribution Centre, we are ideally located to design, develop, manufacture and distribute our ever-expanding product range worldwide.

## Delivering New Products

Our Product Development Team are constantly tracking market trends, approval standards and providing customised products according to unique specification. This ensures we continue to increase our product range to meet the ever-changing needs of our customers.

## A Scolmore\* Group Company

ESP\* has been part of the Scolmore\* Group of companies since 2011, and whilst the company operates independently, ESP\* benefits from the expertise, knowledge and support of the Scolmore\* Group and continues to create strong growth within its product categories.

Scolmore\* has been a leading UK manufacturer of electrical accessories and lighting products since 1989 and has earned a reputation worldwide for high quality products, innovative solutions and exemplary customer service.

Key to the continued success of the group is the commitment to developing new products which incorporate the very latest in technological advancements, and provide contractors and installers with cost-efficient, easy to install solutions that help them remain highly competitive.

## Scolmore® Group App

The Scolmore® Group app allows you to use your smart phone to browse our complete range of products, add products to your Favourites or to the Quote Basket and allows you to email the contents of the basket back to yourself.

With Scolmore®, Ovia® lighting, Esp® and Unicrimp® products available you can use the search facility to easily locate the products required.

Our App also has a useful tool kit featuring: Quick Quote Calculator, Zs Values, Cables Selection & Voltage Drop, Adiabatic Equation Calculator, Power Factor Calculator, KVA Converter, Lighting Cost Saving Calculator, Lighting No. Calculator and many more...



## Online Ordering | [espukonline.com/](http://espukonline.com/)

The updated site now incorporates a number of improved features that allow users to access new information directly and more easily:

- Ordering 24 hours a day 7 days a week with the ability to check current stock levels as required, meaning you are not restricted to ordering during normal office hours.
- Access to on-line catalogues will keep you fully updated with the complete product range and provide information on new products as and when they become available.
- The order tracking service keeps you up to date with the progress of your shipment.
- Managing your administration paper work is now even easier with instant access to reports and essential documents at a click of a button.
- A 'quick buy tab' and the ability to store the most common orders for repeated use, adds to the versatility and flexibility of the revised system.



E-mail us at [info@espuk.com](mailto:info@espuk.com) or call our Sales Office on 01527 51 51 50 and one of our Sales Representatives will be more than happy to get you on-line.

## ESP® Website | [espuk.com](http://espuk.com)

The refreshed new site provides customers with access to detailed product information for the company's extensive range of security products, which includes smart security, CCTV, access control, fire protection, emergency lighting, essentials and sangamo time switches and heating controls.

Stockists can also take advantage of a comprehensive product image library, plus a range of literature covering every product category - all available to download at the click of a button. Visitors can keep informed of the latest new products and company developments via regular updates on the news section.

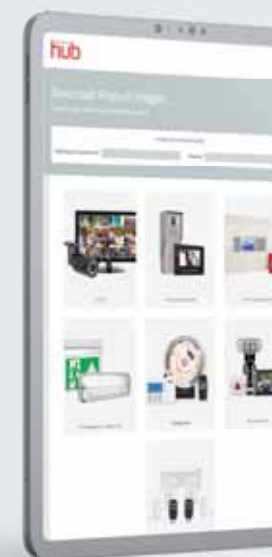


## Marketing Hub |

[espuk.com/marketing-hub](http://espuk.com/marketing-hub)

A brand new feature of the revamped site is the Marketing Hub area which provides ESP® stockists with a range of tools to enhance their own marketing facilities, with very little effort or cost.

A number of templates featuring some of the most popular products are available to download and these can be customised with the stockist's own details to optimise sales opportunities.





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A modern interior space featuring a dark wooden dining table with grey upholstered chairs. A large vase of flowers sits on the table. In the background, a staircase with a black metal railing and a glass balustrade leads up. The walls are made of large, light-colored stone tiles. A track lighting fixture is mounted on the ceiling.

**fort**

# SMART SECURITY PRODUCTS

At ESP® we create simple, smart solutions for a safer and more comfortable home. Discover a whole range of smart home products. From smart alarm kits, smart cameras, smart sensors and smart door bells, all working together to make your home smarter and safer.

 **ClickSmart+**

**All of ESP's Fort products are compatible with the Click Smart+ app.**

Peace of mind away from home. Easily check and change the status of your Fort devices wherever you are.





### ECSPK1

#### Smart Security Alarm Kit 1

Kit Contains:

1 x Smart hub, 1 x PIR, 1 x Door/Window Contact,  
1 x Remote Control

- Smart Alarm Kit
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK1A

#### Fort Smart Alarm Kit

Kit Contains:

1 x Smart Hub, 1 x PIR, 1 x Contact, 1 x Remote Control,  
1 x Keypad & 1 x Solar Siren

Smart Alarm Kit:

- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK1B

#### Fort Smart Alarm Kit

Kit Contains:

1 x Smart Hub, 1 x PIR, 1 x Contact, 1 x Remote Control,  
1 x Keypad, 1 x Solar Siren & 1 x Smart WiFi Door Bell

Smart Alarm Kit:

- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK2

#### Smart Security Alarm Kit 2

Kit Contains:

1 x Smart hub, 2 x PIR, 1 x Door/Window Contact,  
1 x Remote Control

- Smart Alarm Kit
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK2A

#### Fort Smart Alarm Kit

Kit Contains:

1 x Smart Hub, 2 x PIRs, 1 x Contact, 1 x Remote Control,  
1 x Keypad & 1 x Solar Siren

Smart Alarm Kit:

- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK2B

#### Fort Smart Alarm Kit

Kit Contains:

1 x Smart Hub, 2 x PIRs, 1 x Contact, 1 x Remote Control,  
1 x Keypad, 1 x Solar Siren & 1 x Smart WiFi Door Bell

Smart Alarm Kit:

- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included





### ECSPK3 Smart Security Alarm Kit 3

Kit Contains:  
1 x Smart hub, 3 x PIR, 2 x Door/Window Contact,  
2 x Remote Control

- Smart Alarm Kit
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK3A Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 3 x PIRs, 2 x Contacts, 1 x Remote Control, 1 x Keypad & 1 x Solar Siren

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK3B Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 3 x PIRs, 2 x Contacts, 1 x Remote Control,  
1 x Keypad, 1 x Solar Siren & 1 x Smart WiFi Door Bell

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK4 Smart Security Alarm Kit 4

Kit Contains:  
1 x Smart hub, 4 x PIR, 2 x Door/Window Contact,  
2 x Remote Control

- Smart Alarm Kit
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK4A Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 4 x PIRs, 1 x Contacts, 2 x Remote Controls,  
1 x Keypad & 1 x Solar Siren

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK4B Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 4 x PIRs, 1 x Contact, 2 x Remote Controls,  
1 x Keypad, 1 x Solar Siren & 1 x Smart WiFi Door Bell

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included





### ECSPK5 Smart Security Alarm Kit 5

Kit Contains:  
1 x Smart hub, 1 x Pet PIR, 1 x Door/Window Contact, 1 x Remote Control

- Smart Alarm Kit
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK5A Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 1 x Pet PIR, 1 x Contact, 1 x Remote Control, 1 x Keypad & 1 x Solar Siren

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK5B Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 1 x Pet PIR, 1 x Contact, 1 x Remote Control, 1 x Keypad, 1 x Solar Siren & 1 x Smart Wi-Fi Door Bell

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK6 Smart Security Alarm Kit 6

Kit Contains:  
1 x Smart hub, 2 x Pet PIR, 2 x Door/Window Contact, 2 x Remote Control

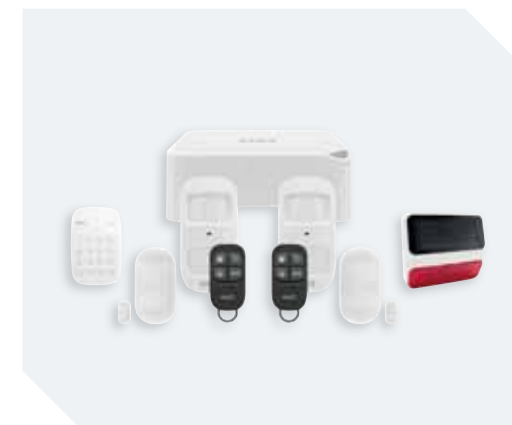
- Smart Alarm Kit
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK6A Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 2 x Pet PIRs, 2 x Contacts, 1 x Remote Control, 1 x Keypad & 1 x Solar Siren

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



### ECSPK6B Fort Smart Alarm Kit

Kit Contains:  
1 x Smart Hub, 2 x Pet PIRs, 2 x Contacts, 1 x Remote Control, 1 x Keypad, 1 x Solar Siren & 1 x Smart Wi-Fi Door Bell

- Smart Alarm Kit:
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included



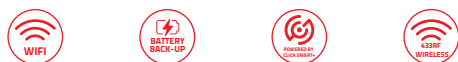


- Smart Alarm Hub
- Wi-Fi Enabled with GSM Back-up Facility
- Activations and Monitoring Supported via APP
- No Additional Subscriptions or Fees Required
- Supports up to 32 RF Devices
- Built-in siren (95dB)
- Built-in Backup Battery, With Up To 8 Hours Standby Time
- 80 Meter Open Field RF Transmission (433Mhz)
- 2.4GHz Wi-Fi Connection Required
- Sim Card Not Included

#### General Information

Material	ABS
Operating Voltage	12VDC 1A
Backup Battery	Internal 7.4V600mAh Li-Po Battery
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Network Connection	Wi-Fi 2.4GHz
GSM (SIM Required)	850/900/1800/1900 MHz
Internal Siren	95dB
System Requirements	Mobile Device Running IOS 8 or Higher or Android 4.1x or Higher
Dimensions	109.5mm x 109.5mm x 40mm
Operating Conditions	-10°C ~ 55°C

**ECSPHB**  
Smart Security Alarm Hub



- Smart Alarm Keypad
- Requires Smart Alarm Hub (ECSPHB)
- 80 Meter Open Field RF Transmission (433Mhz)
- Arm, Disarm, Home Mode and Panic Function
- Supports up to 50 Proximity Tags (ECSPPX)
- Battery Powered (Supplied)
- Low Power Indication
- Tamper Protection

#### General Information

Material	ABS
Operating Voltage	3 x AAA Batteries
Minimum Battery Life	1 Year (dependant on activations)
Total fobs	50
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Dimensions	135mm x 90mm x 15mm
Operating Conditions	-10°C ~ 55°C

**ECSPKY**  
Smart Security Alarm Keypad



- Smart Alarm Door/Window Contact
- 80 Meters Open Field RF Transmission (433Mhz)
- Requires Smart Alarm Hub (ECSPHB)
- Suitable for Doors & Windows
- Battery Powered (Supplied)
- Low Power Indication
- Tamper Protection

#### General Information

Material	ABS
Operating Voltage	1 x CR2477 3V Battery
Minimum Battery Life	1 Year (dependant on activations)
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Transmitter Dimensions	55.7mm x 30.3mm x 16mm
Magnet Dimensions	25mm x 10mm x 9mm
Operating Conditions	-10°C ~ 55°C

**ECSPCT**  
Smart Security Alarm Contact



- Smart Alarm Vibration Sensor
- Battery Powered (Supplied)
- Low Power Indication
- 80 Meter Open Field RF Transmission (433Mhz)
- Requires Smart Alarm Hub (ECSPHB)

#### General Information

Material	ABS
Operating Voltage	1 x CR2477 3V Battery
Minimum Battery Life	1 Year (dependant on activations)
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Force Sensitivity	10 - 50 grams
Dimensions	60mm x 39mm x 17mm
Operating Conditions	-10°C ~ 55°C

**ECSPVS**  
Smart Security Alarm Vibration Sensor







- Smart Alarm PIR
- 80 Meter Open Field RF Transmission (433Mhz)
- Detection Coverage: 8m/110°
- Requires Smart Alarm Hub (ECSPHB)
- Battery Powered (Supplied)
- Low Power Indication
- Tamper Protection

General Information

Material	ABS
Operating Voltage	2 x AA Batteries
Minimum Battery Life	1 Year (dependant on activations)
PIR Detection Range	8m
PIR Detection Angle	110°
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Dimensions	107mm x 53mm x 32mm
Operating Conditions	-10°C ~ 55°C

**ECSPPIR**  
Smart Security Alarm PIR



- Smart Alarm PET PIR
- 80 Meter Open Field RF Transmission (433Mhz)
- Requires Smart Alarm Hub (ECSPHB)
- Detection Coverage: 8m/110°
- Battery Powered (Supplied)
- Pet Friendly < 25Kg
- Low Power Indication
- Tamper Protection

General Information

Material	ABS
Operating Voltage	2 x AA Batteries
Minimum Battery Life	1 Year (dependant on activations)
PIR Detection Range	8m
PIR Detection Angle	110°
Pet Tolerance	<25kg
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Dimensions	107mm x 53mm x 32mm
Operating Conditions	-10°C ~ 55°C

**ECSPPET**  
Smart Security Alarm Pet PIR



- Smart Alarm Remote Control
- 80 Meter Open Field RF Transmission (433Mhz)
- Arm, Disarm, Home Mode and Panic Function
- Requires Smart Alarm Hub (ECSPHB)
- Battery Powered (Supplied)
- Low Power Indication

General Information

Material	ABS
Operating Voltage	1 x CR2025 3V Battery
Minimum Battery Life	1 Year (dependant on activations)
Device Input	4 buttons - Disarm, Arm, Home Arm, SOS
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Dimensions	3.4mm x 1.1mm x 6.3mm
Operating Conditions	-10°C ~ 55°C

**ECSPRC**  
Smart Security Alarm Remote Control



- Smart Alarm RF Signal Booster
- USB Powered with Recharging Backup Battery
- 80 Meter Open field RF Transmission (433Mhz)
- Requires Smart Alarm Hub (ECSPHB)

General Information

Material	ABS
Operating Voltage	5V 1.1A (USB)
Backup Battery	3.7V 300mAh Lithium Battery
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Dimensions	60mm x 39mm x 17mm

**ECSPBST**  
Smart Security Alarm Booster





- Requires Smart Alarm Hub (ECSPHB) & Keypad (ECSPKY)
- Smart Alarm Proximity Tag (2 Pack)
- Disarm the System via Proximity

**ECSPPX**  
Smart Security Alarm Fob



General Information	
Material	ABS
Operating Frequency	125KHz
Dimensions	3mm x 0.7mm x 4.5mm



- Smart Alarm SOS Button
- Raise an Alert Instantly
- Battery Powered (Supplied)
- 80 Meter Open Field RF Transmission (433Mhz)
- Requires Smart Alarm Hub (ECSPHB)

**ECSPSOS**  
Smart Security Alarm SOS Control



General Information	
Material	ABS
Operating Voltage	1 x CR2025 3V Battery
Minimum Battery Life	1 Year (dependant on activations)
Device Input	1 button - SOS
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Dimensions	3.4mm x 0.7mm x 6.3mm
Operating Conditions	-10°C - 55°C



**ECSPEXS**  
Smart Security Alarm Solar Siren



- Smart Alarm External Solar Powered Siren
- Built-In Siren (110dB) and LED Indication
- Suitable for Outdoor Use (IP44 Ingress Protection)
- Compact Design: 162x182mm
- Rechargeable Backup Battery, with up to 40 Day Standby
- Low Power Indication
- Tamper Protection
- 80 Meter Open Field RF Transmission (433Mhz)
- For use with Smart Alarm Hub (ECSPHB)

General Information	
Material	ABS
Operating Voltage	Solar Powered
Battery Backup	Lithium 18650 3.7V/2200mAh
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Ingress Protection	IP44
Dimensions	162mm x 182mm x 65mm
Operating Conditions	-10°C - 55°C



**ECSPEXS**  
Smart Security Alarm Wired Siren



- Smart Alarm External Mains Powered Siren
- Built-In Siren (110dB) and LED Indication
- Suitable for Outdoor Use (IP44 Ingress Protection)
- Compact Design: 162x182mm
- Rechargeable Backup Battery, with up to 40 Day Standby
- Low Power Indication
- Tamper Protection
- 80 Meter Open Field RF Transmission (433Mhz)
- For use with Smart Alarm Hub (ECSPHB)

General Information	
Material	ABS
Operating Voltage	12V DC
Battery Backup	Lithium 18650 3.7V/2200mAh
Device Communication	RF 433 MHz
Transmission Distance	80m (Open field)
Anti-Tamper	Built-in Microswitch
Ingress Protection	IP44
Dimensions	162mm x 182mm x 65mm
Operating Conditions	-10°C - 55°C



- Full 1080p HD Live View & Recording
- No Subscription or Additional Fees Required
- 110° Wide Angle Camera View
- 5000K LED Lamp
- 2500 Lumen Output (25w)
- Motion Activated Video Record
- Clear Two-Way Audio
- Remotely Activate or Dim LED Lamp
- IP65 Rated Ingress Protection
- Requires 2.4GHz Wi-Fi Network Connection
- Operating Temperature: -10 +40°C
- Dimensions: 258 x 88 x 184mm

General Information	
Camera Resolution	1920 x 1080
Angle of View	110°
Storage Device	Micro SD Card (128GB Max.)
WiFi Frequency	2.4GHz
Infrared Range	5-10m
Light Output	2500 Lumens (25 Watts)
IP Rating	IP65
Power	110 - 220 VAC
Dimensions	258mm x 188mm x 184mm

ECSPCAMSFW WHITE ECSPCAMSFB BLACK  
Smart Security Floodlight Camera



- Full 1080p HD Live View & Recording
- No Subscription or Additional Fees Required
- 110° Wide Angle Camera View
- 5000K LED Lamp
- 2000 Lumen Output (25w)
- Motion Activated Video Record
- Clear Two-Way Audio
- Remotely Activate or Dim LED Lamp
- IP65 Rated Ingress Protection
- Requires 2.4GHz Wi-Fi Network Connection
- Operating Temperature: -10 +40°C
- Dimensions: 283 x 133 x 184 mm

General Information	
Camera Resolution	1920 x 1080
Angle of View	110°
Storage Device	Micro SD Card (128GB Max.)
WiFi Frequency	2.4GHz
Infrared Range	5-10m
Light Output	2000 Lumens (25 Watts)
IP Rating	IP65
Power	110 - 220 VAC
Dimensions	283mm x 133mm x 184mm

ECSPCAMFLW WHITE ECSPCAMFLB BLACK  
Smart Security Spotlight Camera



- Full 1080p HD Live View, Recording & Visitor Notifications
- No Subscription or Additional Fees Required
- Battery Powered with up to 750 Activations on Full Charge
- Plug-in RF Chime Included
- IP54 Rated Ingress Protection
- 5m Infrared LED Illumination
- 3m PIR Detection Range
- 130° Wide Angle Camera View
- Motion Activated Video Record (Storage Included)
- Clear Two-Way Audio

General Information	
Camera Resolution	1920 x 1080
Sensor Size	1/2.9"
Lens	4mm Fixed
Viewing Angle	130°
Infrared Distance	5 meters
PIR Distance	3 meters
Storage	Micro SD (up to 128GB)
Connectivity	Wi-Fi 2.4GHz
Power	2 x Rechargeable 18650 3.7 3350mAh Lithium-Ion Batteries
Dimensions	140.51mm x 50mm x 29mm

ECSPDB  
Smart Security Doorbell



- Full 1080p HD Live View & Recording
- No Subscription or Additional Fees Required
- Battery Powered with up to 750 Activations on Full Charge
- 8m Infrared LED Illumination
- 7m PIR Detection Range
- 130° Wide Angle Camera View
- Motion Activated Video Record (Storage Included)
- Clear Two-Way Audio
- IP65 Rated Ingress Protection

General Information	
Camera Resolution	1920 x 1080
Sensor Size	1/2.9"
Lens	3.3mm
Viewing Angle	125°
Infrared Distance	7 meters
PIR Distance	6 meters
Storage	Micro SD (up to 128GB)
Connectivity	Wi-Fi 2.4GHz
Power	2 x Rechargeable 18650 3.7 3350mAh Lithium-Ion Batteries
Dimensions	100.72mm x 57mm x 59.93mm

ECSPCAM65  
Smart Security External Camera





- Full 1080p HD Live View & Recording
- Motion Activated Video Record (Storage Included)
- No Subscription or Additional Fees Required
- 10m Infrared LED Illumination
- 85° Wide Angle Camera View
- Clear Two-Way Audio

General Information	
Camera Resolution	1920 x 1080
Sensor Size	1/2.7"
Lens	4mm Fixed
Viewing Angle	85°
Infrared Distance	10 meters
Storage Device	Micro SD Card (128GB Max.)
Connectivity	Wi-Fi 2.4GHz
Power	5VDC1.1A (Micro-USB 1m supplied)
Dimensions	70mm x 70mm x 91mm

**ECSPCAM**  
Smart Security Camera



- Full 1080p HD Live View & Recording
- No Subscription or Additional Fees Required
- 355° Pan and 180° Tilt Remote Control Function
- 3-5m Infrared LED Illumination
- 140° Wide Angle View
- Motion Tracking and Record
- Clear Two-Way Audio
- 2.4Ghz Wi-Fi Connection Required

General Information	
Camera Resolution	1920 x 1080
Sensor Size	1/2.7"
Viewing Angle	140°
Infrared Distance	3-5 meters
Storage Device	Micro SD Card (128GB Max.)
Connectivity	Wi-Fi 2.4GHz
Power	5VDC1.1A (Micro-USB 1m supplied)
Dimensions	Ø75mm x 114mm

**ECSPCAMPT**  
Smart Security PT Camera



- Wi-Fi Controlled Thermostat
- Remote Monitoring and Scheduling
- Multiple Energy Saving Features
- Clear LED Display and Manual Controls
- 2.4GHz Wi-Fi Connection Required

Thermostat	
Power Supply	2 x AA Batterys
Temperature Display Range	+0 to +50
Temperature Set Range	+5 to +35
Temperature Display Accuracy	0.1
Temperature Setting Accuracy	0.5
Relay Rating	8A @ 250V AC
Ingress Protection Rating	IP21
Transmission Frequency	868 MHz
Transmission Distance	100m (open field)
Mounting	Wall or Stand
Dimensions	100x100x22mm
Receiver	
Power Supply	100-240V AC
Power Source	Flylead or Mains adapter (comes supplied)
Relay Rating	8A @ 250V AC
Transmission Frequency	868MHz
Transmission Distance	100m
WiFi Frequency	2.4GHz
Dimensions	86x86x28.5

**ECSPST**  
Smart Controls WiFi Programmable  
Thermostat White



- Wi-Fi Controlled Mains (13A) & USB Sockets
- Control and Schedule Through APP
- Automate with Other Click Smart+ App Devices
- 2.4GHz Wi-Fi Connection Required

Material	Polycarbonate
Operating Voltage	110-240V AC 0/60Hz
Max Load (Watts)	3120W
Max Load (Amperes)	13A
Network Protocol	WiFi
Network Frequency	2.4GHz
Outputs	1 x Mains Socket 2 x USB-A Socket 1 x USB-C Socket
Surge Protection	2000V AC
Dimensions	76x51x61 (HxWxD)

**ECSPSP**  
Smart Controls WiFi USB & Mains Plug





# CCTV

The ESP® CCTV range offers the installer a practical range of security and observation solutions reflecting the best features of established and emerging CCTV technology. The range includes cameras from 1080p (2 Megapixel) to 4K (8 Megapixel) using the latest in analog and IP technology to deliver superior image quality.



rekor IP

HDview

DigiviewHD<sup>+</sup>

rekor HD





# rekor IP™

## 2 Megapixel 24/7 Colour IP POE Cameras and Kits



2MP Cameras



Premium Surveillance  
Hard Drive



ESP App for Smart Devices



Power over Ethernet  
Connection

Fixed Lens Cameras



Ingress Protection Rating



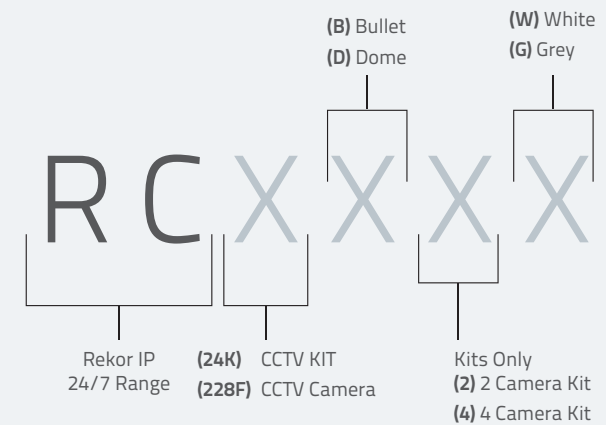
Suitable for use during  
Day and Night



Efficient Data Storage



## Get kitted out with the code finder



Code (White)	Code (Grey)	Description
<b>Rekor IP 2MP Cameras &amp; Kits</b>		
RC228FDW	RC228FDG	IP PoE 2MP 2.8mm Dome Camera
RC228FBW	RC228FBG	IP PoE 2MP 2.8mm Bullet Camera
RC24KB2W	RC24KB2G	IP PoE 2MP 4 Channel 2 Bullet Camera Kit 1TB
RC24KB4W	RC24KB4G	IP PoE 2MP 4 Channel 4 Bullet Camera Kit 1TB
RC24KD2W	RC24KD2G	IP PoE 2MP 4 Channel 2 Dome Camera Kit 1TB
RC24KD4W	RC24KD4G	IP PoE 2MP 4 Channel 4 Dome Camera Kit 1TB



- HD 2MP Resolution
- 2.8mm Fixed Lens
- 1/2.8" Image Sensor
- White LED and IR Function up to 30 Meters
- 115° Diagonal Viewing Angle
- Built-In Mic & Speaker
- Supports 128GB MicroSD Card
- IP67 Housing Ingress Protection

Sensor Size	1/2.8"
Lens	2.8mm
Horizontal Viewing Angle	106.7°
Vertical Viewing Angle	57.1°
Diagonal Viewing Angle	115.7°
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP67
Minimum Illumination	0.002 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
White Light Distance	30 Meters
Compression	H.265/H.264
Video bit rate	128Kbps ~ 6Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL, SNMP
Network Monitoring	Web browser, Client Software, Android & iOS
Power	12VDC/PoE

**RC228FDW**  
IP PoE 2MP 2.8mm Dome Camera White



- HD 2MP Resolution
- 2.8mm Fixed Lens
- 1/2.8" Image Sensor
- White LED and IR Function up to 30 Meters
- 115° Diagonal Viewing Angle
- Built-In Mic & Speaker
- Supports 128GB MicroSD Card
- IP67 Housing Ingress Protection

Sensor Size	1/2.8"
Lens	2.8mm
Horizontal Viewing Angle	106.7°
Vertical Viewing Angle	57.1°
Diagonal Viewing Angle	115.7°
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP67
Minimum Illumination	0.002 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
White Light Distance	30 Meters
Compression	H.265/H.264
Video bit rate	128Kbps ~ 6Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL, SNMP
Network Monitoring	Web browser, Client Software, Android & iOS
Power	12VDC/PoE

**RC228FDG**  
IP PoE 2MP 2.8mm Dome Camera Grey



- HD 2MP Resolution
- 2.8mm Fixed Lens
- 1/2.8" Image Sensor
- White LED and IR Function up to 30 Meters
- 115° Diagonal Viewing Angle
- Built-In Mic & Speaker
- Supports 128GB MicroSD Card
- IP67 Housing Ingress Protection

Sensor Size	1/2.8"
Lens	2.8mm
Horizontal Viewing Angle	106.7°
Vertical Viewing Angle	57.1°
Diagonal Viewing Angle	115.7°
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP67
Minimum Illumination	0.002 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
White Light Distance	30 Meters
Compression	H.265/H.264
Video bit rate	128Kbps ~ 6Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL, SNMP
Network Monitoring	Web browser, Client Software, Android & iOS
Power	12VDC/PoE



**RC228FBW**  
IP PoE 2MP 2.8mm Bullet Camera White



**RC228FBG**  
IP PoE 2MP 2.8mm Bullet Camera Grey





RC24KB2W White RC24KB2G Grey  
4 Channel CCTV System

- Complete with NVR, Weatherproof IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 Channel IP PoE NVR
- White LED and IR Function for 24/7 Colour Images
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection

- Pre-Installed Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Up to 250m Cable Length per Channel

System	
Incoming Bandwidth	64Mbps
Outgoing Bandwidth	48Mbps
PoE Ports	4CH (<250 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160 (HDMI Only)
Recording	
Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	4K/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	1 x 4K@30, 4 x 5MP@25, 4 x 4MP@25, 4 x 3MP@25, 4 x 1080p@30
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SMTP, RTSP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<9W (without hard disk)
PoE Type	IEEE802af/at
Operation Condition	-10°C to +55°C
Dimensions	205x205x46mm
External Power Supply	
Power Input	AC 110-240V
Power Output	DC48V/1.7A - 65W



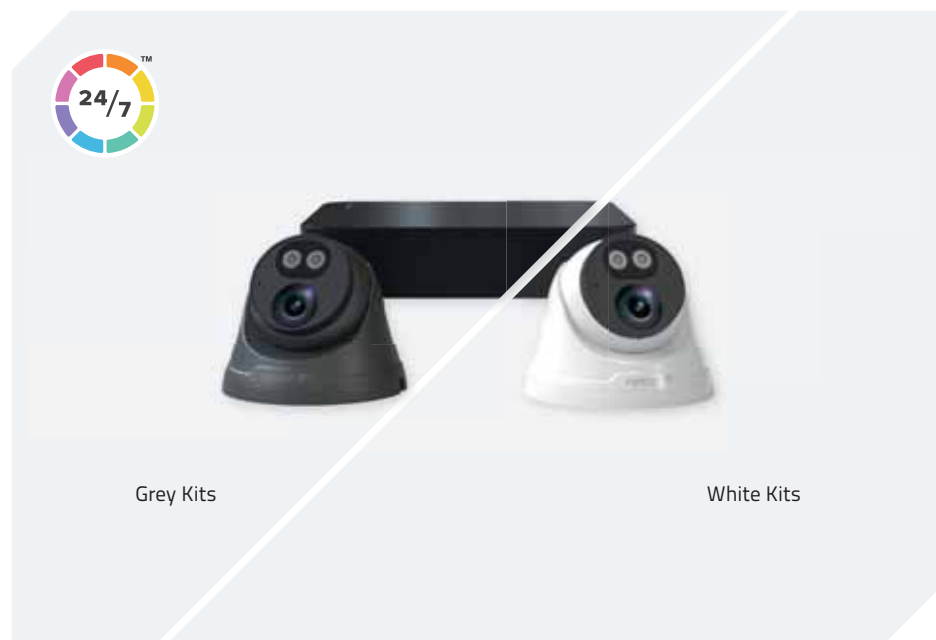
White RC24KB4W Grey RC24KB4G  
4 Channel CCTV System

- Complete with NVR, Weatherproof IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 Channel IP PoE NVR
- White LED and IR Function for 24/7 Colour Images
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection

- Pre-Installed Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Up to 250m Cable Length per Channel

System	
Incoming Bandwidth	64Mbps
Outgoing Bandwidth	48Mbps
PoE Ports	4CH (<250 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160 (HDMI Only)
Recording	
Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	4K/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	1 x 4K@30, 4 x 5MP@25, 4 x 4MP@25, 4 x 3MP@25, 4 x 1080p@30
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SMTP, RTSP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<9W (without hard disk)
PoE Type	IEEE802af/at
Operation Condition	-10°C to +55°C
Dimensions	205x205x46mm
External Power Supply	
Power Input	AC 110-240V
Power Output	DC48V/1.7A - 65W



## RC24KD2G Grey RC24KD2W White 4 Channel CCTV System

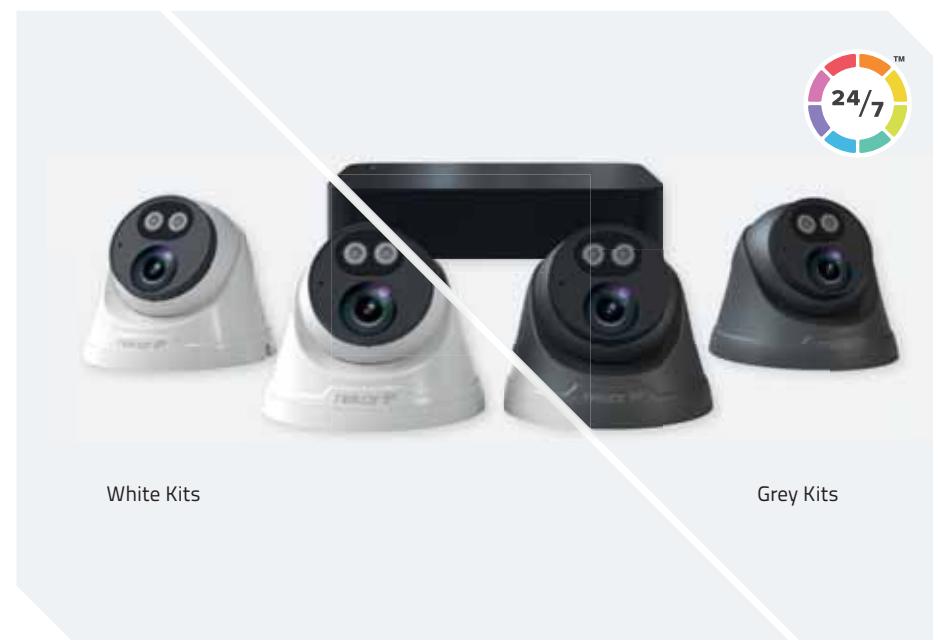


- Complete with NVR, Weatherproof IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 Channel IP PoE NVR
- White LED and IR Function for 24/7 Colour Images
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection

- Pre-Installed Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Up to 250m Cable Length per Channel

System	
Incoming Bandwidth	64Mbps
Outgoing Bandwidth	48Mbps
PoE Ports	4CH (<250 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160 (HDMI Only)
Recording	
Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	4K/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	1 x 4K@30, 4 x 5MP@25, 4 x 4MP@25, 4 x 3MP@25, 4 x 1080p@30
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SMTP, RTSP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<9W (without hard disk)
PoE Type	IEEE802af/at
Operation Condition	-10°C to +55°C
Dimensions	205x205x46mm
External Power Supply	
Power Input	AC 110-240V
Power Output	DC48V/1.7A - 65W



## White RC24KD4W Grey RC24KD4G 4 Channel CCTV System

- Complete with NVR, Weatherproof IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 Channel IP PoE NVR
- White LED and IR Function for 24/7 Colour Images
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection

- Pre-Installed Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Up to 250m Cable Length per Channel

System	
Incoming Bandwidth	64Mbps
Outgoing Bandwidth	48Mbps
PoE Ports	4CH (<250 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160 (HDMI Only)
Recording	
Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	4K/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	1 x 4K@30, 4 x 5MP@25, 4 x 4MP@25, 4 x 3MP@25, 4 x 1080p@30
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SMTP, RTSP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<9W (without hard disk)
PoE Type	IEEE802af/at
Operation Condition	-10°C to +55°C
Dimensions	205x205x46mm
External Power Supply	
Power Input	AC 110-240V
Power Output	DC48V/1.7A - 65W



# 5 & 8 Megapixel 24/7 Colour IP POE Cameras and NVRs



5MP & 8MP  
Options



Premium Surveillance  
Hard Drive



ESP App for Smart Devices



Power over Ethernet  
Connection

Fixed Lens Cameras



Ingress Protection Rating



Suitable for use during  
Day and Night

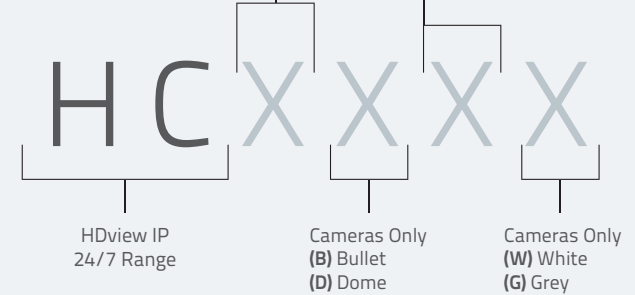


Efficient Data Storage



- (528F) 5MP 2.8mm Fixed Camera
- (828F) 8MP 2.8mm Fixed Camera
- (84R) 8MP 4 Channel CCTV Recorder
- (88R) 8MP 8 Channel CCTV Recorder
- (816R) 8MP 16 Channel CCTV Recorder
- (832R) 8MP 32 Channel CCTV Recorder
- (864R) 8MP 64 Channel CCTV Recorder

- NVR's Only
- (1TB) 1TB Hard Drive
- (2TB) 2TB Hard Drive
- (4TB) 4TB Hard Drive
- (8TB) 8TB Hard Drive
- (12TB) 12TB Hard Drive
- (16TB) 16TB Hard Drive
- (32TB) 32TB Hard Drive



Code (White)	Code (Grey)	Description
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## HDview IP 24/7 Colour Cameras

HC528FDW	HC528FDG	IP PoE 5MP 2.8mm Dome Camera White
HC528FBW	HC528FBG	IP PoE 5MP 2.8mm Bullet Camera White
HC828FDW	HC828FDG	IP PoE 8MP 2.8mm Dome Camera White
HC828FBW	HC828FBG	IP PoE 8MP 2.8mm Bullet Camera White

Code	Description
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## HDview IP 24/7 Colour NVR's

HC84R	HDview IP 24/7 IP PoE 8MP 4CH NVR 1TB
HC84R2TB	HDview IP 24/7 IP PoE 8MP 4CH NVR 2TB
HC84R4TB	HDview IP 24/7 IP PoE 8MP 4CH NVR 4TB
HC84R8TB	HDview IP 24/7 IP PoE 8MP 4CH NVR 8TB
HC88R	HDview IP 24/7 IP PoE 8MP 8CH NVR 1TB
HC88R2TB	HDview IP 24/7 IP PoE 8MP 8CH NVR 2TB
HC88R4TB	HDview IP 24/7 IP PoE 8MP 8CH NVR 4TB
HC88R8TB	HDview IP 24/7 IP PoE 8MP 8CH NVR 8TB
HC816R	HDview IP 24/7 IP PoE 8MP 16CH NVR 2TB
HC816R4TB	HDview IP 24/7 IP PoE 8MP 16CH NVR 4TB
HC816R8TB	HDview IP 24/7 IP PoE 8MP 16CH NVR 8TB
HC816R12TB	HDview IP 24/7 IP PoE 8MP 16CH NVR 12TB
HC816R16TB	HDview IP 24/7 IP PoE 8MP 16CH NVR 16TB
HC832R	HDview IP 24/7 IP PoE 8MP 32CH NVR 4TB
HC832R8TB	HDview IP 24/7 IP PoE 8MP 32CH NVR 8TB
HC832R16TB	HDview IP 24/7 IP PoE 8MP 32CH NVR 16TB
HC832R32TB	HDview IP 24/7 IP PoE 8MP 32CH NVR 32TB
HC864R	HDview IP 24/7 IP 8MP 64CH NVR 8TB
HC864R12TB	HDview IP 24/7 IP 8MP 64CH NVR 12TB
HC864R16TB	HDview IP 24/7 IP 8MP 64CH NVR 16TB
HC864R24TB	HDview IP 24/7 IP 8MP 64CH NVR 24TB
HC864R32TB	HDview IP 24/7 IP 8MP 64CH NVR 32TB
HC864R48TB	HDview IP 24/7 IP 8MP 64CH NVR 48TB
HC864R64TB	HDview IP 24/7 IP 8MP 64CH NVR 64TB





- HD Resolution
- 2.8mm Fixed Lens
- 1/2.8mm Image Sensor
- White LED and IR Function up to 30 Meters
- 115° Diagonal Viewing Angle
- Built-in Mic & Speaker
- Supports 128GB Micro SD Card
- IP67 Housing Ingress Protection

Sensor Size	1/2.8"
Lens	2.8mm
Horizontal Viewing Angle	101.1°
Vertical Viewing Angle	55.3°
Diagonal Viewing Angle	111.1°
Effective Pixels	5MP (2880 x 1620)
Ingress Protection	IP67
Minimum Illumination	0.003 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
White Light Distance	30 Meters
Compression	H.265/H.264
Video bit rate	128Kbps ~ 6Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL, SNMP
Network Monitoring	Web browser, Client Software, Android & iOS
Power	12VDC/PoE

**HC528FDW** IP PoE 5MP 2.8mm Dome Camera White  
**HC528FDG** IP PoE 5MP 2.8mm Dome Camera Grey



- HD Resolution
- 2.8mm Fixed Lens
- 1/2.8mm Image Sensor
- White LED and IR Function up to 30 Meters
- 115° Diagonal Viewing Angle
- Built-in Mic & Speaker
- Supports 128GB Micro SD Card
- IP67 Housing Ingress Protection

Sensor Size	1/2.8"
Lens	2.8mm
Horizontal Viewing Angle	106.7°
Vertical Viewing Angle	57.1°
Diagonal Viewing Angle	115.7°
Effective Pixels	8MP (3840 x 2160)
Ingress Protection	IP67
Minimum Illumination	0.003 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
White Light Distance	30 Meters
Compression	H.265/H.264
Video bit rate	128Kbps ~ 6Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL, SNMP
Network Monitoring	Web browser, Client Software, Android & iOS
Power	12VDC/PoE

**HC828FDW** IP PoE 8MP 2.8mm Dome Camera White  
**HC828FDG** IP PoE 8MP 2.8mm Dome Camera Grey



- HD Resolution
- 2.8mm Fixed Lens
- 1/2.8mm Image Sensor
- White LED and IR Function up to 30 Meters
- 115° Diagonal Viewing Angle
- Built-in Mic & Speaker
- Supports 128GB Micro SD Card
- IP67 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	2.8mm
Horizontal Viewing Angle	112.9°
Vertical Viewing Angle	59.1°
Diagonal Viewing Angle	121.2°
Effective Pixels	5MP (2880 x 1620)
Ingress Protection	IP67
Minimum Illumination	0.003 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
White Light Distance	30 Meters
Compression	H.265/H.264
Video bit rate	128Kbps ~ 6Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4, IGMP, ICMP, ARP, TCP, UDP, DHCP, RTP, RTSP, RTCP, RTMP, DNS, DDNS, NTP, FTP, UPnP, HTTP, HTTPS, SMTP, SSL, SNMP
Network Monitoring	Web browser, Client Software, Android & iOS
Power	12VDC/PoE



**BBW1** CCTV 24/7 Bullet Deep Base White  
**BBG1** CCTV 24/7 Bullet Deep Base Grey



**BBW1** CCTV 24/7 Bullet Deep Base White  
**BBG1** CCTV 24/7 Bullet Deep Base Grey





## HC84R IP PoE 8MP 4CH NVR 1TB



- HD Resolution Recording
- H.265 Video Compression for Efficient Storage
- Intelligent Features such as Line Cross Detection and Perimeter Intrusion Detection
- Playback/Record/Remote View Simultaneously
- Continuous/Scheduled/Motion Detection/Intelligent Record Modes

- Remote Monitoring VIA APP
- HDMI Output up to 4K
- USB Backup for Evidence Transfer
- Pre-Installed Surveillance Hard Drive
- Up to 250m Cable Length per Channel

### System

Incoming Bandwidth	80Mbps
Outgoing Bandwidth	64Mbps
PoE Ports	4CH (<250 Meters per Channel)

### Video & Audio

Video Input	4CH
Audio Output	1CH

### Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	3840X2160 @30 (HDMI Only), 1920X1080@60, 1920X1080@50, 1600X1200@60, 1280X1024@60, 1280X720@60, 1024X768@60

### Recording

Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	4K/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	2 x 4k@30, 3 x 5MP@30, 4 x 4MP@30
Recording Mode	Manual/Motion Detection/Schedule

### Playback & Backup

Backup Mode	Network/2 x USB2.0
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### Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP
Network Monitoring	Web browser, Client Software, Android & IOS

### Storage

Internal HDD	1TB HDD
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### General

NVR Power Consumption	<9W (without hard disk)
PoE Type	IEEE802af/at
Operation Condition	-10°C ~ +55°C
Dimensions	240x260x47mm

### External Power Supply

Power Input	AC 110-240V
Power Output	DC48V/1.7A ~ 65W



## HC88R IP PoE 8MP 8CH NVR 1TB



- HD Resolution Recording
- H.265 Video Compression for Efficient Storage
- Intelligent Features such as Line Cross Detection and Perimeter Intrusion Detection
- Playback/Record/Remote View Simultaneously
- Continuous/Scheduled/Motion Detection/Intelligent Record Modes

- Remote Monitoring VIA APP
- HDMI Output up to 4K
- USB Backup for Evidence Transfer
- Pre-Installed Surveillance Hard Drive
- Up to 250m Cable Length per Channel

### System

Incoming Bandwidth	80Mbps
Outgoing Bandwidth	64Mbps
PoE Ports	8CH (<250 Meters per Channel)

### Video & Audio

Video Input	8CH
Audio Output	1CH

### Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9
Resolution	3840X2160 @30 (HDMI Only), 1920X1080@60, 1920X1080@50, 1600X1200@60, 1280X1024@60, 1280X720@60, 1024X768@60

### Recording

Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	4K/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	2 x 4k@30, 3 x 5MP@30, 4 x 4MP@30, 5 x 3MP@30, 8 x 1080p@30
Recording Mode	Manual/Motion Detection/Schedule

### Playback & Backup

Backup Mode	Network/2 x USB2.0
-------------	--------------------

### Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP
Network Monitoring	Web browser, Client Software, Android & IOS

### Storage

Internal HDD	1TB HDD
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### General

NVR Power Consumption	<8W (without hard disk)
PoE Type	IEEE802af/at
Operation Condition	-10°C ~ +55°C
Dimensions	240x260x47mm

### External Power Supply

Power Input	AC 110-240V
Power Output	DC52V/1.8A ~ 93.6W



## HC816R

IP PoE 8MP 16CH NVR 2TB



- HD Resolution Recording
- H.265 Video Compression for Efficient Storage
- Intelligent Features such as Line Cross Detection and Perimeter Intrusion Detection
- Playback/Record/Remote View Simultaneously
- Continuous/Scheduled/Motion Detection/Intelligent Record Modes

- Remote Monitoring VIA APP
- HDMI Output up to 4K
- USB Backup for Evidence Transfer
- Pre-Installed Surveillance Hard Drive
- Up to 250m Cable Length per Channel

### System

Incoming Bandwidth	160Mbps
Outgoing Bandwidth	64Mbps
PoE Ports	16CH (<250 Meters per Channel)

### Video & Audio

Video Input	16CH
Audio Output	1CH

### Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9/16/25/36
Resolution	3840X2160 @30 (HDMI Only), 1920X1080@60, 1920X1080@50, 1600X1200@60, 1280X1024@60, 1280X720@60, 1024X768@60

### Recording

Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	8MP/6MP/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	2 x 4K@30, 4x 4MP@30, 5 x 3MP@30, 8 x 1080P@30, 16 x 720P@30
Recording Mode	Manual/Motion Detection/Schedule

### Playback & Backup

Backup Mode	Network/2 x USB2.0
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### Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP
Network Monitoring	Web browser, Client Software, Android & IOS

### Storage

Internal HDD	2TB HDD
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### General

NVR Power Consumption	<10W (without hard disk)
Power Input	100 ~ 240V AC (C13)
PoE Type	IEEE802.3af/at
Operation Condition	-10°C ~ +55°C
Dimensions	380x315x53mm



## HC832R

IP PoE 8MP 32CH NVR 4TB



- HD Resolution Recording
- 32 Channel IP PoE NVR with 16 PoE Ports
- H.265 Video Compression for Efficient Storage
- Intelligent Features such as Line Cross Detection and Perimeter Intrusion Detection
- Playback/Record/Remote View Simultaneously

- Continuous/Scheduled/Motion Detection/Intelligent Record Modes
- Remote Monitoring VIA APP
- HDMI Output up to 4K
- USB Backup for Evidence Transfer
- Pre-Installed Surveillance Hard Drive
- Up to 250m Cable Length per Channel

### System

Incoming Bandwidth	160Mbps
Outgoing Bandwidth	64Mbps
PoE Ports	16CH (<250 Meters per Channel)

### Video & Audio

Video Input	32CH
Audio Output	1CH

### Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9/16/25/36
Resolution	3840X2160 @30 (HDMI Only), 1920X1080@60, 1920X1080@50, 1600X1200@60, 1280X1024@60, 1280X720@60, 1024X768@60

### Recording

Compression	H.265/H.264
Recording Resolution	Up to 8MP
Liveview/Playback Resolution	8MP/6MP/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	2 x 4K@30, 4x 4MP@30, 5 x 3MP@30, 8 x 1080P@30, 16 x 720P@30, 32 x D1@30
Recording Mode	Manual/Motion Detection/Schedule

### Playback & Backup

Backup Mode	Network/2 x USB2.0
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### Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP
Network Monitoring	Web browser, Client Software, Android & IOS

### Storage

Internal HDD	4TB HDD
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### General

NVR Power Consumption	<15W (without hard disk)
Power Input	100 ~ 240V AC (C13)
PoE Type	IEEE802.3af/at
Operation Condition	-10°C ~ +55°C
Dimensions	400x362x74mm



## HC864R IP 64CH NVR 8TB



- HD Resolution Recording
- 64 Channel IP with 2 Uplink Ports
- H.265 Video Compression for Efficient Storage
- Intelligent Features such as Line Cross Detection and Perimeter Intrusion Detection
- Playback/Record/Remote View Simultaneously

- Continuous/Scheduled/Motion Detection/Intelligent Record Modes
- Remote Monitoring VIA APP
- HDMI Output up to 4K
- USB Backup for Evidence Transfer
- Pre-Installed Surveillance Hard Drive
- Up to 250m Cable Length per Channel

### System

Incoming Bandwidth	384Mbps
Outgoing Bandwidth	384Mbps
Uplinks Ports	2

### Video & Audio

Video Input	64CH
Audio Output	1CH

### Display

Output	2 x HDMI, 1 x VGA
Display Split	1/4/6/8/9/16/25/36/64(HDMI Only)
Resolution	3840X2160 @30 (HDMI Only), 1920X1080@60, 1920X1080@50, 1600X1200@60, 1280X1024@60, 1280X720@60, 1024X768@60

### Recording

Compression	H.265/H.264
Recording Resolution	12MP/8MP/6MP/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Liveview/Playback Resolution	12MP/8MP/6MP/5MP/4MP/3MP/1080p/960p/720p/D1/2CIF/CIF
Decoding Capability	2 x 12MP@30, 4 x 4K@30, 8 x 4MP@30, 9 x 4MP@25, 16 x 1080P@30, 32 x 960P@25, 36 x 720P@30, 64 x D1
Recording Mode	Manual/Motion Detection/Schedule

### Playback & Backup

Backup Mode	Network/2 x USB2.0
-------------	--------------------

### Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP
Network Monitoring	Web browser, Client Software, Android & IOS

### Storage

Internal HDD	8TB HDD
--------------	---------

### General

NVR Power Consumption	<25W (without hard disk)
Power Input	100 ~ 240V AC (C13)
PoE Type	IEEE802af/at
Operation Condition	-10°C ~ +55°C
Dimensions	442x426x89mm



# rekor IP™

## 2 Megapixel IP POE Cameras and Kits



2MP Cameras



Premium Surveillance  
Hard Drive



ESP View App for Smart  
Devices



Power over Ethernet  
Connection

Fixed Lens Cameras



Ingress Protection Rating



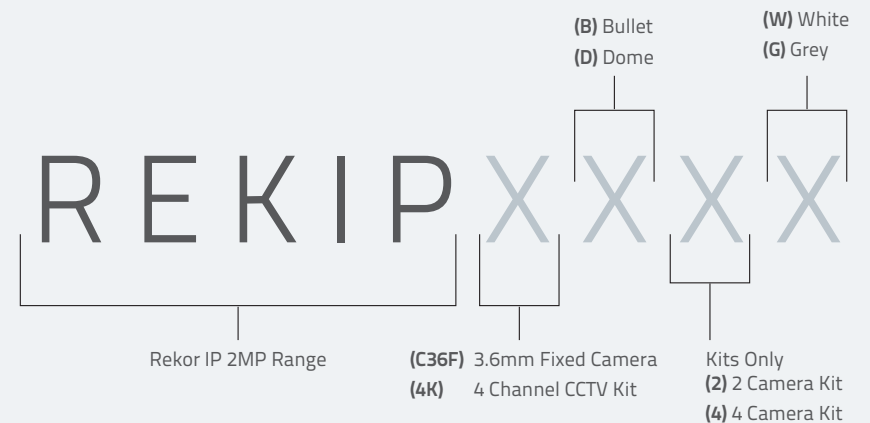
Suitable for use during  
Day and Night



Efficient Data Storage



## Get kitted out with the code finder



Code (White)	Code (Grey)	Description
<strong>Rekor IP 2MP Cameras &amp; Kits</strong>		
REKIP36FBW	REKIP36FBG	Rekor IP Bullet POE 2MP Camera Fixed 3.6mm
	REKIP36FDG	Rekor IP Dome POE 2MP Camera Fixed 3.6mm
REKIP4KB2W		Rekor IP 4 Channel POE 2MP 2 Bullet Camera Kit (1TB)
REKIP4KB4W	REKIP4KB4G	Rekor IP 4 Channel POE 2MP 4 Bullet Camera Kit (1TB)
REKIP4KD2W	REKIP4KD2G	Rekor IP 4 Channel POE 2MP 2 Dome Camera Kit (1TB)
REKIP4KD4W		Rekor IP 4 Channel POE 2MP 4 Dome Camera Kit (1TB)





**REKIPC36FBW**  
White 3.6mm Lens 2MP IP Bullet Camera

**REKIPC36FBG**  
Grey 3.6mm Lens 2MP IP Bullet Camera

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 88° Viewing Angle
- H265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP-PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø71 X138mm
Weight	250g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C



**REKIPC36FDG**  
Grey 3.6mm Lens 2MP IP Dome Camera

Sensor Size	1/2.7"
Lens	3.6mm
Effective Pixels	2MP (1920 x 1080)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 ~ 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps ~ 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PP-PoE,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø100x82 mm
Weight	260g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 88° Viewing Angle
- H265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection



## REKIP4KB2W

### 4 Channel CCTV System



- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 2 x 2MP, Day/ Night, Weatherproof, Bullet Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 2 x IP Cameras, 2 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

System	
Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	2 Megapixel
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm
External Power Supply	
Power Input	AC 110~240V
Power Output	DC48V/1.2A – 60W



White Kits

Grey Kits



## REKIP4KB4G Grey      REKIP4KB4W White

### 4 Channel CCTV System

- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Bullet Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

System	
Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/ Motion Detection/Schedule

Playback & Backup	
Sync Playback	2 Megapixel
Backup Mode	Network/2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm
External Power Supply	
Power Input	AC 110~240V
Power Output	DC48V/1.2A – 60W



REKIP4KD2W  
4 Channel CCTV System



- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Dome Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

System	
Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

Playback & Backup	
Sync Playback	2 Megapixel
Backup Mode	Network/ 2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm
External Power Supply	
Power Input	AC 110~240V
Power Output	DC48V/1.2A – 60W



REKIP4KD4W White  
4 Channel CCTV System



- Complete with NVR, IP Cameras, Cable & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- 4 x 2MP, Day/ Night, Weatherproof, Dome Style IP Cameras
- H.265 Video Compression for Efficient Storage
- Pre-Installed 1TB Premium Surveillance Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

System	
Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)
Video & Audio	
Video Input	4CH
Audio Output	1CH
Display	
Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160
Recording	
Compression	H.265/H.264
Resolution	2 Megapixel
Record Rate (Main Stream)	2 Megapixel
Recording Mode	Manual/ Motion Detection/Schedule

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR (HDD inc.), 4 x IP Cameras, 4 x 18.3 Meter Pre-terminated Network Cable, System Power Supply, Manual, HDMI Lead, Mouse Control

Playback & Backup	
Sync Playback	2 Megapixel
Backup Mode	Network/ 2 x USB2.0
Network	
Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	
Internal HDD	1TB HDD
General	
NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm
External Power Supply	
Power Input	AC 110~240V
Power Output	DC48V/1.2A – 60W



# 5 Megapixel IP POE Cameras and NVRs



5MP Cameras



Premium Surveillance  
Hard Drive



ESP View App for Smart  
Devices



Power over Ethernet  
Connection



Pan and Tilt Options



Motorized Lens Cameras

Fixed Lens Cameras



Ingress Protection Rating



Suitable for use during  
Day and Night



Efficient Data Storage



Impact Rating



360° Rotation



- (C36F) 3.6mm Fixed Camera
- (C28F) 2.8mm Fixed Camera
- (C2812VF) 2.8mm -12mm Varifocal Camera
- (C550VF) 5mm -50mm Varifocal Camera
- (C11F) 1.1mm Fisheye Camera
- (CPTZ) Pan, Tilt, Zoom Camera
- (4R) 4 Channel CCTV Recorder
- (8R) 8 Channel CCTV Recorder
- (16R) 16 Channel CCTV
- (32R) 32 Channel CCTV

# HDVIP

HDview IP 5MP Range



Cameras Only  
(B) Bullet  
(D) Dome

Cameras Only  
(W) White  
(G) Grey

- NVR's Only
- (2TB) 2TB Hard Drive
- (4TB) 4TB Hard Drive
- (8TB) 8TB Hard Drive
- (12TB) 12TB Hard Drive
- (16TB) 16TB Hard Drive

Code (White)	Code (Grey)	Description
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#### HDview IP 5MP Cameras

HDVIP28FDW2	HDVIP28FDG2	HDview IP Dome POE 5MP Camera 2.8mm
HDVIP28FBW2	HDVIP28FBG2	HDview IP Bullet POE 5MP Camera 2.8mm
HDVIP28FDWAV2		HDview IP Dome POE 5MP Camera Fixed 2.8mm Vandal
HDVIP2812VFBW2	HDVIP2812VFBG2	HDview IP Bullet POE 5MP Camera Varifocal 2.8-12mm
HDVIP2812VFDW	HDVIP2812VFDG2	HDview IP Dome POE 5MP Camera Varifocal 2.8-12mm
HDVIP2812VFDWAV	HDVIP2812VFDGAV	HDview IP Dome POE 5MP Camera Varifocal 2.8-12mm Vandal
HDVIP2PTZ		HDview IP PTZ Dome POE 5MP Camera
HDVIP11FDW		HDview IP Fisheye POE 5MP Camera 1.1mm
HDVIP550VFBW		HDview IP Bullet POE 5MP Camera 5-50mm

Code	Description
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#### HDview IP NVR's

HDVIP4R	HDview IP 4 Channel NVR 5MP (1TB)
HDVIP4R2TB	HDview IP 4 Channel NVR 5MP (2TB)
HDVIP4R4TB	HDview IP 4 Channel NVR 5MP (4TB)
HDVIP4R8TB	HDview IP 4 Channel NVR 5MP (8TB)
HDVIP8R	HDview IP 8 Channel NVR 5MP (1TB)
HDVIP8R2TB	HDview IP 8 Channel NVR 5MP (2TB)
HDVIP8R4TB	HDview IP 8 Channel NVR 5MP (4TB)
HDVIP8R8TB	HDview IP 8 Channel NVR 5MP (8TB)
HDVIP16R	HDview IP 16 Channel NVR 5MP (4TB)
HDVIP16R8TB	HDview IP 16 Channel NVR 5MP (8TB)
HDVIP16R12TB	HDview IP 16 Channel NVR 5MP (12TB)
HDVIP16R16TB	HDview IP 16 Channel NVR 5MP (16TB)
HDVIP132R	HDview IP 32 Channel NVR 5MP (4TB)
HDVIP132R8TB	HDview IP 32 Channel NVR 5MP (8TB)
HDVIP132R12TB	HDview IP 32 Channel NVR 5MP (12TB)
HDVIP132R16TB	HDview IP 32 Channel NVR 5MP (16TB)



- HD 5MP Resolution
- 2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 97° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Microphone
- IP66 Housing Ingress Protection
- 12VDC/PoE
- <7W Power Consumption
- Operating Temperature: -30 - +55°C

Sensor Size	1/2.7"
Lens Size	2.8mm
Effective Pixels	5MP (2592 x 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	30 metres
Compression	H.265
Video Bit Rate	256Kbps - 8Mbps
Interface	RJ45 10/100 BASE-T
Network Protocol	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP,RTSP,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Storage	Micro SD Card (<256GB)
Power	12V DC/PoE
Consumption	<9W
Dimensions	72mm x 72mm x 151mm
Weight	250g

## HDVIPC28FBW2

IP 5MP Bullet 2.8mm Camera White



- HD 5MP Resolution
- 2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 97° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Microphone
- IP66 Housing Ingress Protection
- 12VDC/PoE
- <7W Power Consumption
- Operating Temperature: -30 - +55°C

Sensor Size	1/2.7"
Lens Size	2.8mm
Effective Pixels	5MP (2592 x 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	30 metres
Compression	H.265
Video Bit Rate	256Kbps - 8Mbps
Interface	RJ45 10/100 BASE-T
Network Protocol	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP,RTSP,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Storage	Micro SD Card (<256GB)
Power	12V DC/PoE
Consumption	<9W
Dimensions	100mm x 100mm 82mm
Weight	250g

## HDVIPC28FBG2

IP 5MP Bullet 2.8mm Camera Grey



IPCDBW White Camera Deep Base  
IPCDBG Grey Camera Deep Base

- HD 5MP Resolution
- 2.8-12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 102° - 31° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Audio I/O
- IP66 Housing Ingress Protection
- 256Kbps-8Mbps bit Rate
- 12VDC/POE

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps - 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP,RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capacity)
Audio	I/O
Power	12VDC/PoE
Consumption	<9W
Dimension	Ø88X240mm
Weight	805g
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C

Grey 2.8-12mm Lens 5MP IP Bullet Camera **HDVIPC2812VFBG2**  
White 2.8-12mm Lens 5MP IP Bullet Camera **HDVIPC2812VFBW2**



IPCDBW White Camera Deep Base

## HDVIPC2812VFDW2

White 2.8-12mm Lens 5MP IP Dome Camera

- HD 5MP Resolution
- 2.8-12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 31 - 102° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Audio I/O
- IP66 Housing Ingress Protection
- 256Kbps-8Mbps Bit Rate
- 12VDC/PoE
- <9W Power Consumption
- Operating Temperature: -30 - +60°
- Dimensions: 126 x 126 x 103mm
- Weight: 735g

Sensor Size	1/2.7"
Lens Size	2.8 - 12mm
Effective Pixels	5MP (2592 x 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	45 metres
Compression	H.265
Video Bit Rate	256Kbps - 8Mbps
Interface	RJ45 10/100 BASE-T
Network Protocol	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP,RTSP,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Storage	Micro SD Card (<256GB)
Audio	I/O
Power	12V DC/PoE
Consumption	<9W
Dimensions	126mm x 126mm x 103mm
Weight	735g







- HD 5MP Resolution
- 2.8-12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 31 - 102° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Audio I/O
- IP66 Housing Ingress Protection
- 256Kbps-8Mbps Bit Rate
- 12vDC/PoE
- <9W Power Consumption

Sensor Size	1/2.7"
Lens Size	2.8 - 12mm
Effective Pixels	5MP (2592 x 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	45 metres
Compression	H.265
Video Bit Rate	256Kbps - 8Mbps
Interface	RJ45 10/100 BASE-T
Network Protocol	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP/RTSP,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Storage	Micro SD Card (<256GB)
Audio	I/O
Power	12V DC/PoE
Consumption	<9W
Dimensions	126mm x 126mm x 103mm
Weight	735g

## HDVIP2812VFDG2

Grey 2.8-12mm Lens 5MP IP Dome Camera



- HD 5MP Resolution
- 2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 97° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Microphone
- IP66 Housing Ingress Protection
- 12vDC/PoE
- <7W Power Consumption
- Operating Temperature: -30 ~ +55°C

Sensor Size	1/2.7"
Lens Size	2.8mm
Effective Pixels	5MP (2592 x 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	30 metres
Compression	H.265
Video Bit Rate	256Kbps - 8Mbps
Interface	RJ45 10/100 BASE-T
Network Protocol	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP/RTSP,SMTP,NTP,UPnP,SNMP,HTTPS,FTP
Storage	Micro SD Card (<256GB)
Power	12V DC/PoE
Consumption	<9W
Dimensions	72mm x 72mm 151mm
Weight	250g

**HDVIP28FDW2** IP 5MP Dome 2.8mm Camera White

**HDVIP28FDG2** IP 5MP Dome 2.8mm Camera Grey



- HD 5MP Resolution
- 5-50mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 60m Infrared LED Illumination
- 45~7° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection

Sensor Size	1/2.7"
Lens	5-50mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	60 Meters
Compression	H.265/H.264
Video bit rate	256Kbps - 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTSP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	<8W

## HDVIP550VFBW

White 5-50mm Lens 5MP IP Bullet Camera



- HD 5MP Resolution
- 4.8-86.4mm Varifocal Lens (18x Zoom)
- Full Pan, tilt and zoom operation
- Full 360° rotation pan function
- 1/2.5" Image Sensor
- 60m Infrared LED Illumination
- 61.2-2.32° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection
- Powered via Supplied PSU or POE Injector Required

Sensor Size	1/2.5"
Lens	4.8-86.4mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Minimum Illumination	0.1 Lux
Auto Electronic Shutter	1/2 - 1/20000s
IR Distance	60 Meters
Compression	H.265/H.264
Video bit rate	8Kbps - 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	IPv4/IPv6,HTTP,HTTPS,802.1x,Qos,FTP,SMTP,UPnP,SNMP,DNS,DDNS,NTP,RTSP,RTSP/IP,UDP,IGMP,ICMP,DHCP,PPPoE
Network Monitoring	Web browser, Client Software
Power	12vDC/POE
Consumption	< 30W
Dimension	208 X 251mm (Excludes bracket)
Weight	4Kg
Storage Temperature	-30°C+60°C
Operating Temperature	-30°C+55°C



## HDVIP550VFBW

4.8-86.4mm Lens 5MP IP PTZ Camera





- HD 5MP Resolution
- 2.8~12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 103 - 51° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Alarm Trigger Input & output / Audio I&O/Reset
- IP66 Housing Ingress Protection
- IK10 Impact Protection

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Impact Rating	IK10
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps - 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capacity)
Alarm	I/O
Audio	I/O
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø147X117mm
Weight	1067g
Storage Temperature	-30°C~+60°C
Operating Temperature	-30°C~+55°C

## HDVIP2812VFDWAV

White 2.8-12mm Lens 5MP IP Vandal Resistant Dome Camera



- HD 5MP Resolution
- 2.8~12mm Varifocal Lens (Motorized)
- 1/2.7" Image Sensor
- 45m Infrared LED Illumination
- 103 - 51° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- Additional Features: SD storage / Alarm Trigger Input & output / Audio I&O/Reset
- IP66 Housing Ingress Protection
- IK10 Impact Protection

Sensor Size	1/2.7"
Lens	2.8-12mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Impact Rating	IK10
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	45 Meters
Compression	H.265/H.264
Video bit rate	256Kbps - 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capacity)
Alarm	I/O
Audio	I/O
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø147X117mm
Weight	1067g
Storage Temperature	-30°C~+60°C
Operating Temperature	-30°C~+55°C

## HDVIP2812VFDGAV

Grey 2.8-12mm Lens 5MP IP Vandal Resistant Dome Camera



## HDVIP28FDWAV2

White 2.8mm Lens 5MP IP Vandal Resistant Dome Camera

- HD 5MP Resolution
- 2.8mm Fixed Lens
- 1/2.7" Image Sensor
- 30m Infrared LED Illumination
- 92° Viewing Angle
- H.265 Compression
- ONVIF Compliant
- IP66 Housing Ingress Protection
- IK10 Impact Protection

Sensor Size	1/2.7"
Lens	2.8mm
Effective Pixels	5MP (2592 X 1944)
Ingress Protection	IP66
Impact Rating	IK10
Minimum Illumination	0.05 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	30 Meters
Compression	H.265/H.264
Video bit rate	256Kbps - 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Power	12vDC/POE
Consumption	< 7W
Dimension	Ø115mm x 91.6mm
Weight	520g
Storage Temperature	-30°C~+60°C
Operating Temperature	-30°C~+55°C



- HD 5MP Resolution
- 1.1mm Fixed Lens
- 1/2.9" Image Sensor
- 5m Infrared LED Illumination
- 360° Viewing Angle
- H265 Compression
- ONVIF Compliant
- Additional Features: SD Storage / Alarm Trigger Input & Output/Audio I&O / Video Output
- IP64 Housing Ingress Protection
- Suitable for NVR Models HDVIP16R, HDVIP32R Only and PC Viewing

Sensor Size	1/2.9"
Lens	1.1mm
Effective Pixels	5MP (2160 x 2160)
Ingress Protection	IP64
Minimum Illumination	0.1 Lux
Auto Electronic Shutter	1/5 - 1/20000s
IR Distance	5 Meters
Compression	H.265/H.264
Video bit rate	8Kbps - 8Mbps
Interface	RJ45 10M / 100M Ethernet
Network Functions	TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP,PPPoE,SMTP,NT-P,UPnP,SNMP,HTTPS,FTP
Network Monitoring	Web browser, Client Software, Android & IOS
Storage	microSD Card (<128G Capacity)
Alarm	I/O
Audio	Mic.
Video Out	CVBS
Power	12vDC/POE
Consumption	< 5W
Dimension	Ø120*55mm
Weight	400g
Storage Temperature	-30°C~+60°C
Operating Temperature	-30°C~+55°C



## HDVIP11FDW

White 1.1mm Lens 5MP IP Dome Camera





## HDVIP4R

### 4 Channel HD 1TB NVR



- HD 5MP Resolution Viewing and Recording
- 4CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (1TB, 2TB, 4TB, 8TB Options)
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

#### System

Operating System	LINUX
Recording Bandwidth	50Mbps
POE	4CH (<100 Meters per Channel)

#### Video & Audio

Video Input	4CH
Audio Output	1CH

#### Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

#### Recording

Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

#### Playback & Backup

Sync Playback	5 Megapixel
Backup Mode	Network/2 x USB2.0

#### Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

#### Storage

Internal HDD	<8TB HDD
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#### General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

#### External Power Supply

Power Input	AC 110~240V
Power Output	DC48V/1.2A – 60W



## HDVIP8R2TB

### 8 Channel HD 2TB NVR



- HD 5MP Resolution Viewing and Recording
- 8CH POE NVR- Power Over Ethernet
- H.265 Video Compression for Efficient Storage
- ONVIF Compliant
- Premium Surveillance Hard Drive (1TB, 2TB, 4TB, 8TB Options)
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu
- Contents: NVR, Power Supply, Manual, HDMI Lead, Mouse Control

#### System

Operating System	LINUX
Recording Bandwidth	80Mbps
POE	8CH (<100 Meters per Channel)

#### Video & Audio

Video Input	8CH
Audio Output	1CH

#### Display

Output	1 x HDMI, 1 x VGA
Display Split	1/4/6/8/9
Resolution	1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160

#### Recording

Compression	H.265/H.264
Resolution	5 Megapixel
Record Rate (Main Stream)	5 Megapixel
Recording Mode	Manual/Motion Detection/Schedule

#### Playback & Backup

Sync Playback	5 Megapixel
Backup Mode	Network/2 x USB2.0

#### Network

Ethernet	RJ-45 port (100/1000M)
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browser, Client Software, Android & IOS

#### Storage

Internal HDD	<8TB HDD
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#### General

NVR Power Consumption	<7W (without hard disk)
NVR Power Source	IEEE802.3af
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	300X227X53mm

#### External Power Supply

Power Input	AC 110~240V
Power Output	DC48V/1.5A – 80W



## HDVIP116R

### IP PoE 5MP 16CH NVR 4TB



- Supports up to 16 IP PoE CCTV Cameras
- Records up to 5MP
- Premium Surveillance Hard Drive pre-installed
- USB back up of recordings for easy evidence transfer
- Remote Monitoring via APP (Android / IOS) or CMS (PC / MAC)

Video & Audio	
Video Input	16 IP PoE Ports
Audio Outputs	1 RCA
Display	
Video Output	VGA & 2 x HDMI
Display Split	1/4/6/8/9/10/10-1/12/13/13-1/14/16
Resolutions	HDMI 1 (Full GUI): 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 3840*2160/EDID
	HDMI 2 (Limited GUI): 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080 VGA (Full GUI): 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080
Recording	
Video Compression	H.264 / H.265
Resolution	Up to 5MP

Playback & Backup	
Sync Playback	16 Channels
Backup Modes	Network / USB Devices
Network	
Ethernet	RJ45 10/100M
Network Monitoring	Web Browsers, CMS, Android & iOS App
Storage	
Storage Mediums	2 x SATA Connections
Maximum Supported Storage Volume	16 TB (8TB per SATA)
Supplied Storage Volume	4 Terabyte
General	
Operating Voltage	110 to 240V AC
Operating Consumption	<12W
Operating Temperature	-10°C to +55°C



## HDVIP132R

### IP PoE 5MP 32CH NVR 4TB



- Supports up to 32 IP CCTV Cameras
- Records up to 5MP
- Premium Surveillance Hard Drive pre-installed
- USB back up of recordings for easy evidence transfer
- Remote Monitoring via APP (Android / IOS) or CMS (PC / MAC)

Video Input	
Video Input	16 IP PoE Ports
Total Input Channels	32
Audio Outputs	1 RCA
Display	
Video Output	VGA & 2 x HDMI
Display Split	1/4/6/8/9/10/10-1/12/13/13-1/14/16/17/19/20/22/25/32/36
Resolutions	HDMI 1 (Full GUI): 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 3840*2160/EDID
	HDMI 2 (Limited GUI): 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080 VGA (Full GUI): 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080
Recording	
Video Compression	H.264 / H.265
Resolution	Up to 5MP

Playback & Backup	
Sync Playback	16 Channels
Backup Modes	Network / USB Devices
Network	
Ethernet	RJ45 10/100M
Network Monitoring	Web Browsers, CMS, Android & iOS App
Storage	
Storage Mediums	2 x SATA Connections
Maximum Supported Storage Volume	4 Terabyte
Supplied Storage Volume	16 Terabyte
General	
Operating Voltage	110 to 240V AC
Operating Consumption	<12W
Operating Temperature	-10°C to +55°C

# HDview

## 4 Megapixel Cameras, DVRs and Kits



4MP Cameras



Premium Surveillance  
Hard Drive



HDview App for Smart  
Devices



OSD Menu



Varifocal Lens Cameras

Fixed Lens Cameras



Ingress Protection Rating



Suitable for use during  
Day and Night



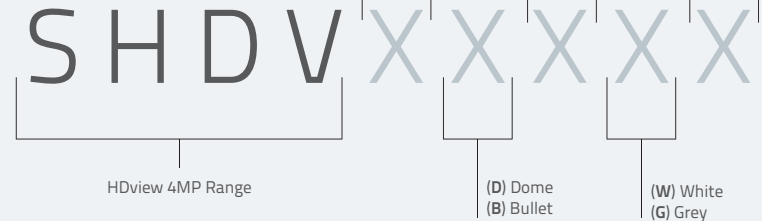
360° Rotation



(C36F) 3.6mm Fixed Camera  
(C2812VF) 2.8-12mm Vari-Focal Camera  
(C622VF) 6-22mm Vari-Focal Camera  
(C550VF) 5-50mm Vari-Focal Camera  
(4R) 4 Channel CCTV Recorder  
(8R) 8 Channel CCTV Recorder  
(16R) 16 Channel CCTV Recorder  
(4K) 4 Channel CCTV Kit  
(8K) 8 Channel CCTV Kit

Kits Only  
(2) 2 Camera Kit  
(4) 4 Camera Kit

Kits Only  
(1TB) 1TB Hard Drive  
(2TB) 2TB Hard Drive  
(4TB) 4TB Hard Drive  
(8TB) 8TB Hard Drive



Code (White)	Code (Grey)	Description
SHDVC36FDW	SHDVC36FDG	4MP Super HD Dome CCTV Camera, 3.6mm Fixed Lens
SHDVC2812VFDW		4MP Super HD Dome CCTV Camera, 2.8-12mm Vari-Focal Lens
SHDVC622VFDW	N/A	4MP Super HD Dome CCTV Camera, 6-22mm Vari-Focal Lens
SHDVC36FBW	SHDVC36FBG	4MP Super HD Bullet CCTV Camera, 3.6mm Fixed Lens
	SHDVC2812VFBG	4MP Super HD Bullet CCTV Camera, 2.8-12mm Vari-Focal Lens
SHDVC622VFBW		4MP Super HD Bullet CCTV Camera, 6-22mm Vari-Focal Lens
SHDVC550VFBW	SHDVC550VFBG	4MP Super HD Bullet CCTV Camera, 5-50mm Vari-Focal Lens
SHDV4R		4MP Super HD 4 Channel CCTV Recorder
SHDV8R		4MP Super HD 8 Channel CCTV Recorder
SHDV16R		4MP Super HD 16 Channel CCTV Recorder
SHDV4KD2W	SHDV4KD2G	4MP Super HD 4 Channel CCTV Dome Kit - 2 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV4KD4W	SHDV4KD4G	4MP Super HD 4 Channel CCTV Dome Kit - 4 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV8KD4W	SHDV8KD4G	4MP Super HD 8 Channel CCTV Dome Kit - 4 Cameras (1TB, 2TB, 4TB & 8TB hard drive options)
SHDV4KB2W	SHDV4KB2G	4MP Super HD 4 Channel CCTV Bullet Kit - 2 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV4KB4W	SHDV4KB4G	4MP Super HD 4 Channel CCTV Bullet Kit - 4 Cameras (500GB, 1TB, 2TB, 4TB & 8TB hard drive options)
SHDV8KB4W	SHDV8KB4G	4MP Super HD 8 Channel CCTV Bullet Kit - 4 Cameras (1TB, 2TB, 4TB & 8TB hard drive options)





**SHDVC550VFBG** Grey 5-50mm Lens 4MP HD Camera  
**SHDVC550VFBW** White 5-50mm Lens 4MP HD Camera



- 5 to 50mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 50m Infrared LED Illumination
- Viewing Angle 42.1~ 6.3°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	50 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/720mA
Lens	5-50mm Manual Zoom
Dimension	Ø104 x 276 (L) mm inc. Bracket
Weight	1190g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



**SHDVC622VFBW**  
White 6-22mm Lens 4MP HD Camera



- 6 to 22mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 50m Infrared LED Illumination
- Viewing Angle 37.2~ 14.4°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	50 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/720mA
Lens	6-22mm Manual Zoom
Dimension	Ø104 x 276 (L) mm inc. Bracket
Weight	1190g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



**SHDVC2812VFBG**  
Grey 2.8-12mm Lens 4MP HD Camera



- 2.8 to 12mm Varifocal Lens
- High Definition 4MP AHD sensor
- Built in 30m Infrared LED Illumination
- Viewing Angle 98~ 34°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	30 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/400mA
Lens	2.8-12mm Manual Zoom
Dimension	Ø75 x 211 (L) mm inc. Bracket
Weight	720g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



**SHDVC36FBG** Grey 3.6mm Lens 4MP HD Camera  
**SHDVC36FBW** White 3.6mm Lens 4MP HD Camera



- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Bullet Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/300mA
Lens	3.6mm Fixed Lens
Dimension	Ø68 x 162 (L) mm inc. Bracket
Weight	400g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



**SHDVC622VFDW**  
White 6-22mm Lens 4MP HD Camera



- Vandal resistant
- 6 to 22mm Varifocal Lens
- High Definition 4MP AHD sensor
- 30m Infrared LED Illumination
- Viewing Angle 40~ 15°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- 3-Axis Cable Management Bracket
- IP66 Weatherproof Dome Housing

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	30 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/450mA
Lens	6-22mm Manual Zoom
Dimension	Ø 138 x 119 (H) mm inc. Base
Weight	1070g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



**SHDVC2812VFDW**  
White 2.8-12mm Lens 4MP HD Camera



- 2.8 to 12mm Varifocal Lens
- High Definition 4MP AHD sensor
- 30m Infrared LED Illumination
- Viewing Angle 98~ 34°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	30 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/360mA
Lens	2.8-12mm Manual Zoom
Dimension	Ø 140 x 105 (H) mm inc. Base
Weight	690g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



**SHDVC36FDW**  
White 3.6mm Lens 4MP HD Camera



- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/220mA
Lens	3.6mm Fixed Lens
Dimension	Ø114 x 83 (H) mm inc. Base
Weight	350g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



**SHDVC36FDG**  
Grey 3.6mm Lens 4MP HD Camera



- 3.6mm Fixed Lens
- High Definition 4MP AHD sensor
- Built in 25m Infrared LED Illumination
- Viewing Angle 76°
- D-WDR incorporating ATR
- 2D and 3D Noise Reduction
- Exposure Control
- High Light Compensation
- IP66 Weatherproof Dome Housing in Metal

Sensor Size	1/3"
Effective Pixels	NTSC/ PAL:2560(H)x1440(V)
Resolution	4 MP (2688 x 1520)
Minimum Illumination	0.1 Lux
Scanning System	Progressive
Auto Electronic Shutter	NTSC: 1/60s~1/100,000s, PAL: 1/50s~1/100,000s
IR Distance	25 Meters
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power/Current	DC12V(+/-10%)/220mA
Lens	3.6mm Fixed Lens
Dimension	Ø114 x 83 (H) mm inc. Base
Weight	350g
Storage Temperature	-30 ~ +60°C RH95% Max
Operating Temperature	-10 ~ +50°C RH95% Max



SHDV4R 4 Channel Full HD 500GB DVR  
SHDV8R 8 Channel Full HD 1TB CCTV DVR



- Hard drive options: SHDV4R - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options – Continuous / Scheduled / Motion
- Remote view via ESP® HDview APP for smartphones
- USB back up of recordings for easy evidence transfer
- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4R - 4 channel BNC SHDV8R - 8 channel BNC
Audio Input	SHDV4R - 4 channel RCA SHDV8R - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4R - 1 and 4 SHDV8R - 1, 4 and 10
Resolution	1024 x768, 1280 x720, 1280 x1024, 1440 x900, 1920 x1080, 2560 x1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4R - 4ch 4MP recording SHDV8R - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	SHDV4R - 4ch 4MP recording SHDV8R - 8ch 2MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C – +55°C / 10% – 90%
Dimensions	250(W)x230(D)x45(H)mm



SHDV116R  
Analogue 4MP 16CH DVR 2TB

- Supports up to 16 Analogue CCTV Cameras
- Records up to 4MP
- Premium Surveillance Hard Drive pre-installed
- USB back up of recordings for easy evidence transfer
- Remote Monitoring via APP (Android / IOS) or CMS (PC / MAC)

Video & Audio	
Video Input	16 BNC Channels
Audio Inputs	16 Channels
Audio Outputs	1 RCA
Display	
Video Output	HDMI, VGA & BNC
Display Split	1/4/6/8/9/10/10-1/12/13/13-1/14/16
Resolutions	HDMI: 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160/EDID 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080, 2560*1440, 3840*2160/EDID
	VGA: 1024*768, 1280*720, 1280*1024, 1440*900, 1920*1080
	BNC: 704*576
Recording	
Video Compression	H.264 / H.265
Resolution	Up to 4MP
Record Rate	16 Channels

Playback & Backup	
Sync Playback	16 Channels
Backup Modes	Network / USB Devices
Network	
Ethernet	RJ45 10/100M
Network Monitoring	Web Browsers, CMS, Android & iOS App
Storage	
Storage Mediums	2 x SATA Connections
Maximum Supported Storage Volume	16 TB (8TB per SATA)
Supplied Storage Volume	2 Terabyte
General	
Operating Voltage	12V DC
Operating Consumption	<12W
Operating Temperature	-10°C to +55°C



## SHDV4KD2G

### 4 Channel Full HD 500GB CCTV System



- Complete with DVR, Cameras, Cable & System Power Supply
- 2 x 4MP HD day/night dome Cameras - SHDVC36FDG/SHDVC36FDW
- Hard drive options: SHDV4KD - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options - Continuous / Scheduled / Motion
- Remote view via ESP<sup>®</sup> HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or PowerLine Adapter (PLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KD - 4 channel BNC SHDV8KD - 8 channel BNC
Audio Input	SHDV4KD - 4 channel RCA SHDV8KD - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KD - 1 and 4 SHDV8KD - 1, 4 and 10
Resolution	1024 x768, 1280 x720, 1280 x1024, 1440 x900, 1920 x1080, 2560x1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C - +55°C / 10% - 90%
Dimensions	250(W)x230(D)x45(H)mm



## 4 Channel Full HD 500GB CCTV System SHDV4KD4G

## 8 Channel Full HD 1TB CCTV System SHDV8KD4G

- Complete with DVR, Cameras, Cable & System Power Supply
- 4 x 4MP HD day/night dome Cameras - SHDVC36FDG/SHDVC36FDW
- Hard drive options: SHDV4KD - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options - Continuous / Scheduled / Motion
- Remote view via ESP<sup>®</sup> HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or PowerLine Adapter (PLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KD - 4 channel BNC SHDV8KD - 8 channel BNC
Audio Input	SHDV4KD - 4 channel RCA SHDV8KD - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KD - 1 and 4 SHDV8KD - 1, 4 and 10
Resolution	1024 x768, 1280 x720, 1280 x1024, 1440 x900, 1920 x1080, 2560x1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	SHDV4KD - 4ch 4MP recording SHDV8KD - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C - +55°C / 10% - 90%
Dimensions	250(W)x230(D)x45(H)mm



Grey Kits

White Kits

Please add colour to the code. G=Grey, W=White. e.g. SHDV4KB4**G**1TB

## SHDV4KB2G

### 4 Channel Full HD 500GB CCTV System



- Complete with DVR, Cameras, Cable & System Power Supply
- 2 x 4MP HD day/night bullet Cameras - SHDVC36FBG/SHDVC36FBW
- Hard drive options: SHDV4KB - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options - Continuous / Scheduled / Motion
- Remote view via ESP<sup>®</sup> HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or PowerLine Adapter (PLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KB - 4 channel BNC SHDV8KB - 8 channel BNC
Audio Input	SHDV4KB - 4 channel RCA SHDV8KB - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KB - 1 and 4 SHDV8KB - 1, 4 and 10
Resolution	1024 x768, 1280 x720, 1280 x1024, 1440 x900, 1920 x1080, 2560x1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C - +55°C / 10% - 90%
Dimensions	250(W)x230(D)x45(H)mm



Grey Kits

White Kits

Please add colour to the code. G=Grey, W=White. e.g. SHDV4KB4**W**4TB



### 4 Channel Full HD 500GB CCTV System SHDV4KB4G 8 Channel Full HD 1TB CCTV System SHDV8KB4G

- Complete with DVR, Cameras, Cable & System Power Supply
- 4 x 4MP HD day/night bullet Cameras - SHDVC36FBG/SHDVC36FBW
- Hard drive options: SHDV4KB - 500GB, 1TB, 2TB, 4TB or 8TB
- 4 Channel System (Supports up to 4 cameras)
- 4 Megapixel live view and recording
- Recording options - Continuous / Scheduled / Motion
- Remote view via ESP<sup>®</sup> HDview APP for smartphones
- USB back up of recordings for easy evidence transfer

- Video outputs HDMI / VGA for connection to a monitor
- Premium Surveillance Hard Drive pre-installed
- Programmable Spot Output
- CMS software included for remote viewing via a pc
- Remote monitoring via wired connection or PowerLine Adapter (PLA)
- Mouse driven comprehensive user interface
- Silent DVR operation

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX
Video & Audio	
Video Input	SHDV4KB - 4 channel BNC SHDV8KB - 8 channel BNC
Audio Input	SHDV4KB - 4 channel RCA SHDV8KB - 4 channel RCA
Audio Output	1 channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA, 1 x Auxiliary
Display Split	SHDV4KB - 1 and 4 SHDV8KB - 1, 4 and 10
Resolution	1024 x768, 1280 x720, 1280 x1024, 1440 x900, 1920 x1080, 2560x1440
Recording	
Video/Audio Compression	H.264 Mainprofile/G.711A
Resolution	4 Megapixel
Record Rate (Main Stream)	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 2MP recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	SHDV4KB - 4ch 4MP recording SHDV8KB - 8ch 4MP recording
Backup Mode	Network/USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	Web browsers, CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA HDD, up to 8TB per HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/2A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C - +55°C / 10% - 90%
Dimensions	250(W)x230(D)x45(H)mm





FHDVC18PTZ

1080P External Pan, Tilt & Zoom Camera



- True High Definition 2MP AHD sensor
- 4.7-84.6mm varifocal lens
- Full pan, tilt and zoom operation
- Full 360° rotation pan function
- 18 x optical zoom
- Up to 50m IR night illumination
- Complete with 2 amp power supply
- IP66 weatherproof rating

Rated Voltage	12V DC
Max Current	1.25A
IR Effective Distance	50M
Protection	IP66
Pan Rotation	360° Endless rotation
Speed	Pan 0.6-200°/s Tilt 3.5-30°/s
Working Conditions	-10°C - +50°C
Dimensions	150(W) x 235(H) x 205(D)mm



PTZCON

Pan, Tilt And Zoom Controller

Protocol	Pelco-P, Pelco-D, Panasonic, HikVision, Samsung, RULE, Dahua, SAE
Baud Rate (bps)	1200, 2400, 4800, 9600, 19200
Max Camera Support	255
Controllers Supported	16 in total (15 auxiliary)
Power Supply	DC 12V±10%
Power Consumption	6W MAX
Working Temperature	0°C-50°C
Dimensions	420 x 260 x 170mm
Outputs	BNC, Audio
VESA Wall Hanging	100 x 100mm
Power Supply	AC100-240V-50/60 Hz 1.1A

- For use with PTZ Cameras
- Keyboard for programming and Camera control
- Integrated LCD display
- 3D joystick for control of Camera pan, tilt and zoom functions

# rekor HD

## 2 Megapixel Cameras and Kits



2MP Cameras



Premium Surveillance  
Hard Drive



ESP View App for  
Smart Devices



360° Rotation

Fixed Lens Cameras



Ingress Protection Rating



Suitable for use during  
Day and Night

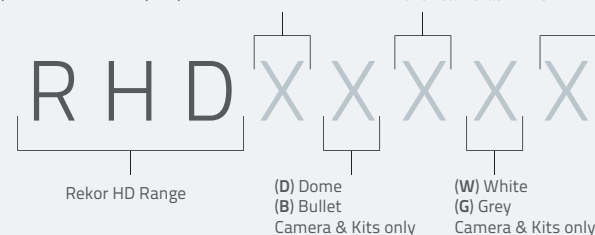


(C36F) Camera  
(2812VF) Camera  
(550VF) Camera  
(4K) 4 Channel Kit

(8K) 8 Channel Kit  
(4R) 4 Channel DVR  
(8R) 8 Channel DVR  
(16R) 16 Channel DVR

(2) or (4)  
No. of Cameras in Kit

(1TB), (2TB), (4TB), (8TB) or (16TB)  
Hard drive options



Code (White)	Code (Grey)	Description
<b>RekorHD Cameras</b>		
RHDC36FBW	RHDC36FBG	3.6mm Lens Full HD Bullet Camera
RHDC36FDW	RHDC36FDG	3.6mm Lens Full HD Dome Camera
RHDC2812VFDW	RHDC2812VFDG	2.8-12mm Lens 2MP HD Analog Dome Camera
RHDC2812VFBW	RHDC2812VFBG	2.8-12mm Lens 2MP HD Analog Bullet Camera
RHDC550VFBW	RHDC550VFBG	5-50mm Lens 2MP HD Analog Bullet Camera
RHDC2812VFDWAV	RHDC2812VFDGAV	2.8-12mm Lens 2MP HD Analog Vandal Resistant Dome Camera
<b>RekorHD Kits</b>		
RHD4KB2W	RHD4KB2G	4 Channel HD 500GB CCTV System - 2 x Bullet
RHD4KB2W1TB	RHD4KB2G1TB	4 Channel HD 1TB CCTV System - 2 x Bullet
RHD4KB2W2TB	RHD4KB2G2TB	4 Channel HD 2TB CCTV System - 2 x Bullet
RHD4KB4W	RHD4KB4G	4 Channel HD 500GB CCTV System - 4 x Bullet
RHD4KB4W1TB	RHD4KB4G1TB	4 Channel HD 1TB CCTV System - 4 x Bullet
RHD4KB4W2TB	RHD4KB4G2TB	4 Channel HD 2TB CCTV System - 4 x Bullet
RHD8KB4W	RHD8KB4G	8 Channel HD 1TB CCTV System - 4 x Bullet
RHD8KB4W2TB	RHD8KB4G2TB	8 Channel HD 2TB CCTV System - 4 x Bullet
RHD8KB4W4TB	RHD8KB4G4TB	8 Channel HD 4TB CCTV System - 4 x Bullet
RHD4KD2W	RHD4KD2G	4 Channel HD 500GB CCTV System - 2 x Dome
RHD4KD2W1TB	RHD4KD2G1TB	4 Channel HD 1TB CCTV System - 2 x Dome
RHD4KD2W2TB	RHD4KD2G2TB	4 Channel HD 2TB CCTV System - 2 x Dome
RHD4KD4W	RHD4KD4G	4 Channel HD 500GB CCTV System - 4 x Dome
RHD4KD4W1TB	RHD4KD4G1TB	4 Channel HD 1TB CCTV System - 4 x Dome
RHD4KD4W2TB	RHD4KD4G2TB	4 Channel HD 2TB CCTV System - 4 x Dome
RHD8KD4W	RHD8KD4G	8 Channel HD 1TB CCTV System - 4 x Dome
RHD8KD4W2TB	RHD8KD4G2TB	8 Channel HD 2TB CCTV System - 4 x Dome
RHD8KD4W4TB	RHD8KD4G4TB	8 Channel HD 4TB CCTV System - 4 x Dome
<b>RekorHD DVRs</b>		
RHD4R		4 Channel Full HD 500GB DVR
RHD4R1TB		4 Channel Full HD 1TB DVR
RHD4R2TB		4 Channel Full HD 2TB DVR
RHD8R		8 Channel Full HD 1TB DVR
RHD8R2TB		8 Channel Full HD 2TB DVR
RHD8R4TB		8 Channel Full HD 4TB DVR
RHD16R		16 Channel Full HD 2TB DVR
RHD16R4TB		16 Channel Full HD 4TB DVR
RHD16R8TB		16 Channel Full HD 8TB DVR



**RHDC36FBW**  
White 3.6mm Lens Full HD Camera

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30 ~ +50°C
- Dimensions: Ø71 X 151 mm
- Weight: 350g

Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø71mm x 151mm
Weight	350g
Operating Temperature	-30 ~ +50°C



**RHDC36FDW**  
White 3.6mm Lens Full HD Camera

- HD 2MP Resolution
- 3.6mm Fixed Lens
- 1/2.8" Image Sensor
- 30 Infrared LED Illumination
- 87° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30 ~ +50°C
- Dimensions: Ø100 X 82 mm
- Weight: 400g

Sensor Size	1/2.8"
Effective Pixels	NTSC/ PAL:1920(H) x 1080(V)
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Auto Gain Control	Auto
Power	12vDC
Lens	3.6mm
Dimensions	Ø100mm x 82mm
Weight	400g
Operating Temperature	-30 ~ +50°C



- HD 2MP Resolution
- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 35 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ + 50°C
- Dimensions: Ø88 X 240 mm

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	35m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8-12mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø88mm x 240 mm
Weight	980g
Operating Temperature	-30~ + 50°C

**RHDC2812VFBW** White 2.8-12mm Lens Full HD Camera  
**RHDC2812VFBG** Grey 2.8-12mm Lens Full HD Camera



- HD 2MP Resolution
- 5-50mm Varifocal Lens
- 1/2.8" Image Sensor
- 60m Infrared LED Illumination
- 49~7° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ + 50°C
- Dimensions: Ø108 X 301 mm

Sensor Size	1/2.8"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	60m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	5-50mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø108mm x 301 mm
Weight	1450g
Operating Temperature	-30~ + 50°C

**RHDC550VFBW** White 5-50mm Lens Full HD Camera  
**RHDC550VFBG** Grey 5-50mm Lens Full HD Camera



- HD 2MP Resolution
- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 40 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- 12vDC
- Operating Temperature: -30~ + 50°C
- Dimensions: Ø126 X 102 mm

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	40m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8-12mm Varifocal Lens
Ingress Protection	IP66
Dimensions	Ø126mm x 102 mm
Weight	735g
Operating Temperature	-30~ + 50°C

**RHDC2812VFDG** Grey 2.8-12mm Lens Full HD Camera  
**RHDC2812VFDW** White 2.8-12mm Lens Full HD Camera



- HD 2MP Resolution
- 2.8-12mm Varifocal Lens
- 1/2.7" Image Sensor
- 30 Infrared LED Illumination
- 113~30° Viewing Angle
- IP66 Housing Ingress Protection
- IK10 Impact Protection
- 12vDC
- Operating Temperature: -30~ + 50°C
- Dimensions: Ø147 X 117 mm

Sensor Size	1/2.7"
Effective Pixels	1936 x 1096
Resolution	1080p
Minimum Illumination	0.05 Lux
Scanning System	Progressive
Shutter Speed	Automatic
IR Distance	30m
Video Output	1Vpp, 75 ohms
Gain Control	Auto
Power	12VDC
Lens	2.8-12mm Varifocal Lens
Ingress Protection	IP66
Impact Resistance	IK10
Dimensions	Ø147 X 117 mm
Weight	800g

**RHDC2812VFDGAV** Grey 2.8-12mm Lens Full HD Vandal Resistant Camera  
**RHDC2812VFDWAV** White 2.8-12mm Lens Full HD Vandal Resistant Camera





# RHD4R 4 Channel Full HD 500GB DVR

## RHD8R 8 Channel Full HD 1TB DVR



- HD 2MP Resolution Viewing and Recording
- 4CH Analog DVR
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage
- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	1/4/9
Resolution	1024 x 768, 1280 x 720, 1280 x 1024, 1440 x 900, 1920 x 1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule
Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices

Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C ~ +55°C / 10% ~ 90%
Dimensions	300mm x 227mm x 53mm
Power Supply	DC12V/2A
DVR Power Consumption	<10W
Operating Temperature	0°C~+40°C
Relative Humidity Resistance	Less than 90%RH
Dimensions	



# RHD16R

## 16 Channel Full HD 2TB DVR



- HD 2MP Resolution Viewing and Recording
- 16CH Analog DVR
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage
- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC

- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- HDMI Output (4K)
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System	
Operating System	LINUX
Video & Audio	
Video Input	16 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	1/4/9/16/20
Resolution	1024 x 768, 1280 x 720, 1280 x 1024, 1440 x 900, 1920 x 1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	16ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule
Playback & Backup	
Sync Playback	16ch 1080P playback
Backup Mode	USB2.0 devices

Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	2 SATA 2TB HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C ~ +55°C / 10% ~ 90%
Dimensions	300mm x 227mm x 53mm
Power Supply	DC12V/2A
DVR Power Consumption	<10W
Operating Temperature	0°C~+40°C
Relative Humidity Resistance	Less than 90%RH
Dimensions	





Grey Kits

White Kits

For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KD2G**1TB**

## RHD4KD2G Grey RHD4KD2W White 4 Channel HD 500GB CCTV System



- Complete with 4 Channel DVR, Cameras, Cables & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 2 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 x 720, 1280 x 1024, 1440 x 900, 1920 x 1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA 500GB HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C ~ +55°C / 10% ~ 90%
Dimensions	300mm x 227mm x 53mm



Grey Kits

White Kits

For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KD4G**2TB** (4 Channel)  
For 2TB or 4TB kits please add **2TB or 4TB** to the code. e.g. RHD8KD4G**2TB** (8 Channel)



## 4 Channel HD 500GB CCTV System 8 Channel HD 1TB CCTV System

## RHD4KD4G Grey RHD8KD4G Grey

## RHD4KD4W White RHD8KD4W White

- Complete with 4 Channel DVR, Cameras, Cables & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 x 720, 1280 x 1024, 1440 x 900, 1920 x 1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA 500GB HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C ~ +55°C / 10% ~ 90%
Dimensions	300mm x 227mm x 53mm



Grey Kits

White Kits

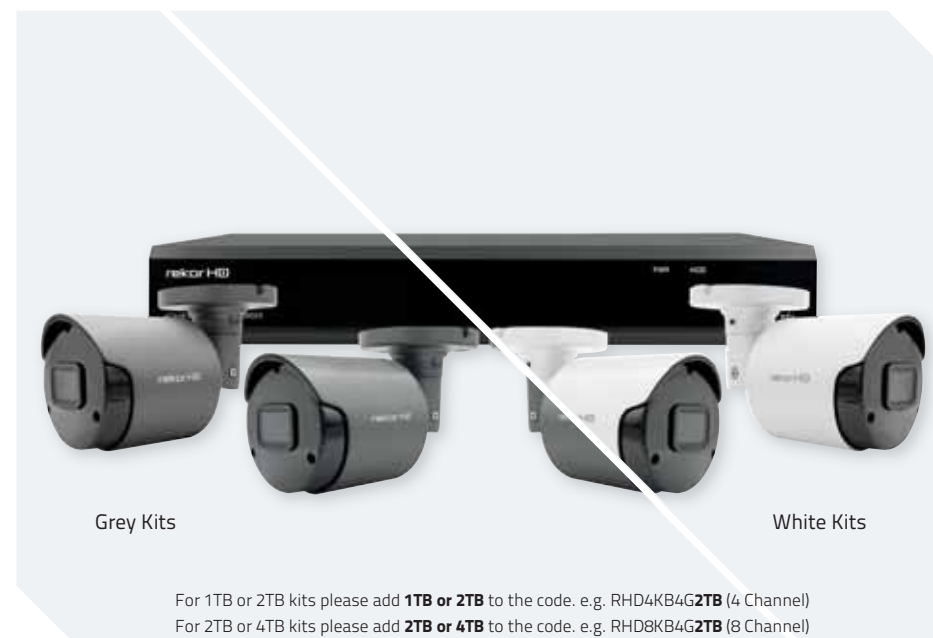
 For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KB2G**1TB**
**RHD4KB2G** Grey    **RHD4KB2W** White  
 4 Channel HD 500GB CCTV System


- Complete with 4 Channel DVR, Cameras, Cables & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 2 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 x 720, 1280 x 1024, 1440 x 900, 1920 x 1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA 500GB HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C ~ +55°C / 10% ~ 90%
Dimensions	300mm x 227mm x 53mm



Grey Kits

White Kits

 For 1TB or 2TB kits please add **1TB or 2TB** to the code. e.g. RHD4KB4G**2TB** (4 Channel)  
 For 2TB or 4TB kits please add **2TB or 4TB** to the code. e.g. RHD8KB4G**2TB** (8 Channel)

 4 Channel HD 500GB CCTV System  
 8 Channel HD 1TB CCTV System

**RHD4KB4G** Grey    **RHD4KB4W** White  
**RHD8KB4G** Grey    **RHD8KB4W** White

- Complete with 4 Channel DVR, Cameras, Cables & System Power Supply
- HD 2MP Resolution Viewing and Recording
- 4 x 2MP, Day/ Night, Weatherproof Cameras
- Intelligent Function, with Perimeter Intrusion Detection & Line Crossing Detection
- H.265 Video Compression for Efficient Storage

- Pre-Installed Premium Hard Drive
- Remote Monitoring via APP (Android / IOS) or PC
- Playback / Record / Remote View Simultaneously
- Continuous / Scheduled / Motion Record Modes
- USB Backup for Evidence Transfer
- Mouse Driven User Menu

System	
Operating System	LINUX
Video & Audio	
Video Input	4 Channel BNC
Audio Input	4 RCA Inputs
Audio Output	1 Channel RCA
Display	
Video Output	1 x HDMI, 1 x VGA & 1 x BNC
Display Split	Single / Quad
Resolution	1024 x 768, 1280 x 720, 1280 x 1024, 1440 x 900, 1920 x 1080, 1080 x 1440, 3840 x 2160
Recording	
Video/Audio Compression	H.265
Resolution	1080P @15fps
Record Rate (Main Stream)	4ch 1080P recording
Recording Mode	Manual/Motion Detection/Schedule

Playback & Backup	
Sync Playback	4ch 1080P playback
Backup Mode	USB2.0 devices
Network	
Ethernet	RJ45 10M/100M
Network Functions	HTTP, IPv4/IPv6, TCP/IP, UPNP, RTSP, UDP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP
Network Monitoring	CMS, Android & iPhone apps
Storage	
Internal HDD	1 SATA 500GB HDD
Auxiliary Interface	
USB Interface	2
General	
Power Supply	DC12V/5A
Power Consumption	<10W (without hard disk)
Operation Condition	0°C ~ +55°C / 10% ~ 90%
Dimensions	300mm x 227mm x 53mm



- Energy efficient wide screen
- 18.5" LED-Backlit Screen
- VGA, HDMI, BNC input for DVR/NVR connection
- Audio Input
- 2 X 2W Speakers
- Complete with desktop stand
- VESA Standard wall mount option
- Internal Power Supply
- Operating Temperature 0° - 40°
- Operating Humidity 10%-80%
- HDMI & VGA Cable Included

Size	18.5" LED
Aspect Ratio	16:09
Resolution (H x V)	1360 x 768
Colours	16.7M
Viewing Angle	H: 170° V: 160°
Contrast Ratio	10000:1 (DCR)
Response Time	5ms
Speakers	2 each (2 watts)
Inputs	BNC, HDMI, VGA, Audio
VESA Wall Hanging	100 x 100mm
Power Supply	AC100-240V~50/60 Hz 1.1A

**MON18L**  
18.5" LED CCTV Monitor



- Energy efficient wide screen
- 21.5" LED-Backlit Screen
- VGA, HDMI, BNC input for DVR/ NVR connection
- Audio Input
- 2 X 2W Speakers
- Complete with desktop stand
- VESA Standard wall mount option
- Internal Power Supply
- Operating Temperature 0° - 40°
- Operating Humidity 10%-80%
- HDMI & VGA Cable Included

Size	21.5" LED
Aspect Ratio	16:09
Resolution (H x V)	1920 x 1080
Colours	16.7M
Viewing Angle	H: 178° V: 178°
Contrast Ratio	10000:1 (DCR)
Response Time	8ms
Speakers	2 each (2 watts)
Inputs	BNC, HDMI, VGA, Audio
VESA Wall Hanging	75 x 75mm
Power Supply	AC100-240V~50/60 Hz 1.1A

**MON21L**  
21.5" LED CCTV Monitor

- Energy efficient wide screen
- 23.8" LED-Backlit Screen
- VGA, HDMI, BNC input for DVR/ NVR connection
- Audio Input
- 2 X 2W Speakers
- Complete with desktop stand
- VESA Standard wall mount option
- Internal Power Supply
- Operating Temperature 0° - 40°
- Operating Humidity 10%-80%
- HDMI & VGA Cable Included

Size	23.8" LED
Aspect Ratio	16:09
Resolution (H x V)	1920 x 1080
Colours	16.7M
Viewing Angle	H: 178° V: 178°
Contrast Ratio	10000:1 (DCR)
Response Time	8ms
Speakers	2 each (2 watts)
Inputs	BNC, HDMI, VGA, Audio
VESA Wall Hanging	75 x 75mm
Power Supply	AC100-240V~50/60 Hz 1.1A

**MON23L**  
23.8" LED CCTV Monitor



- Energy efficient wide screen LED panel
- Sleek black design
- HDMI x 2, DP, VGA, Audio, RS232 In/Out

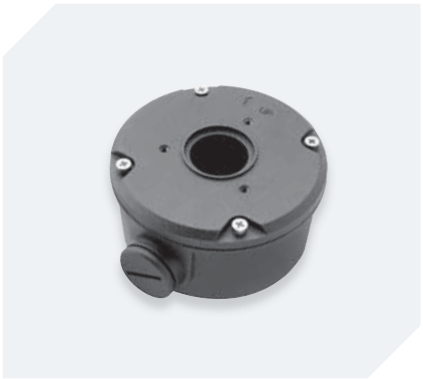
Screen Size (Diagonal)	31.5"
Aspect Ratio	16:09
Supported Resolutions	640x480; 800x600; 1024x768; 1280x1024; 1920x1080; 3840x2160
Viewing Angle	H: 170° V: 170°
Constrast Ratio	3000:1
Response Time	9.5ms
Inputs	2 x HDMI, 1 x Display Port, 1 x VGA, 1 x Audio, 1 x RS232
Outputs	1 x RS232
VESA Wall Mount	200mm x 100mm
Power Input	100 - 240V AC
Power Consumption	<55W

**MON324K**  
LED CCTV 31.5" Monitor Black



**BBW1**  
CCTV 24/7 Bullet Deep Base White

- 25mm Cable Entry
- Aluminium Construction
- Suitable for RC228FBW, HC528FBW, HC828FBW



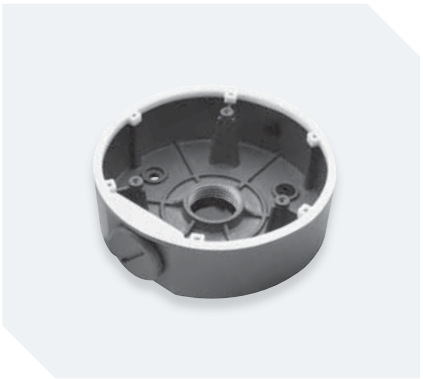
**BBG1**  
CCTV 24/7 Bullet Deep Base Grey

- 25mm Cable Entry
- Aluminium Construction
- Suitable for RC228FBG, HC528FBG, HC828FBG



**DBW3**  
CCTV 24/7 Dome Deep Base White

- 25mm Cable Entry
- Aluminium Construction
- Suitable for use with RC228FDW



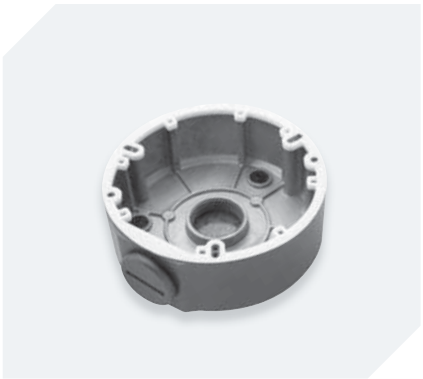
**DBG3**  
CCTV 24/7 Dome Deep Base Grey

- 25mm Cable Entry
- Aluminium Construction
- Suitable for use with RC228FDG



**DBW2**  
CCTV 24/7 Dome Deep Base White

- 25mm Cable Entry
- Aluminium Construction
- Suitable for use with HC528FDW & HC828FDW



**DBG2**  
CCTV 24/7 Dome Deep Base Grey

- 25mm Cable Entry
- Aluminium Construction
- Suitable for use with HC528FDG & HC828FDG



**IPCDBW**  
White Camera Deep Base

- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; REKIPC36FBW, REKIPC36FDW, HDVIP36FBW, HDVIP36FDW2, HDVIP2812VFBW, HDVIP2812VFDW
- Dimensions: 146 x 59 mm



**IPCDBG**  
Grey Camera Deep Base

- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; REKIPC36FBG, REKIPC36FDG, HDVIP28FBG2, HDVIP28FDG2, HDVIP2812VFBG2, HDVIP2812VFDG, HDVIP550VFBG
- Dimensions: 146 x 59 mm



**IPCDBWAV**  
White Camera Deep Base

- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; HDVIP2812VFDWAV
- Dimensions: 146 x 59 mm



**IPCDBGAV**  
Grey Camera Deep Base

- IP66 Rated
- Metal Construction
- G3/4 Cable Gland Supplied
- Suitable for IP Range; HDVIP2812VFDGAV
- Dimensions: 146 x 59 mm



**DATA CABLE, PRE-TERMINATED WITH RJ45**

- CABIP10 - 10m Data Cable
- CABIP20 - 20m Data Cable
- CABIP40 - 40m Data Cable
- CABIP80 - 80m Data Cable



**HDVIP1632RRMB**  
Rack Mount Bracket For Models:  
HDVIP16R, HDVIP32R

- Rack Mount Bracket for Models: HDVIP16R, HDVIP32R
- Suitable for Standard 19" Server Rack Mounting



**IPIN1POE**  
1 Channel POE Injector

- 1 Channel POE Injector
- 30 Watt
- IEEE802.3 Standards
- 100 Meters Transmission

Power Supply	
Input	AC 100-240V
Voltage Range	DC53V
Output	30 Watts
Network Rate	10/100/1000Mbps
Standards	IEEE802.3af/at
Supply Mode	Mid-span
Dimensions	115 x 62.5 x 31 mm
Weight	150g
Storage Temperature	-30°C+60°C
Operating Temperature	0°C-55°C



**IPSW4POE**  
4 Channel POE Switch

- 4 Channel POE Switch
- 60 Watt
- 1 Channel Uplink
- IEEE802.3 Standards
- 100 Meters Transmission Per Port
- Mounting Brackets Supplied

Power Supply	
External	53VDC/1.25A
Voltage Range	DC48-56V
Output	60 Watts
Downlink RJ-45 Port	4*10/100Mbps
Uplink RJ-45 Port	1*10/100Mbps
Standards	IEEE802.3af/at
Supply Mode	End-span
Dimensions	160x94x27mm
Weight	425g
Storage Temperature	-30°C+60°C
Operating Temperature	0°C-55°C



**IPSW8POE**  
8 Channel POE Switch

- 8 Channel POE Switch
- 120 Watt
- 1 Channel Uplink
- IEEE802.3 Standards
- 100 Meters Transmission Per Port
- Mounting Brackets Supplied

Power Supply	
External	53VDC/2.5A
Voltage Range	DC48-56V
Output	120 Watts
Downlink RJ-45 Port	8*10/100Mbps
Uplink RJ-45 Port	1*10/100Mbps
Standards	IEEE802.3af/at
Supply Mode	End-span
Dimensions	220x105x27mm
Weight	612Kg
Storage Temperature	-30°C~60°C
Operating Temperature	0°C~55°C

- Plug and play installation
- One Input and one output PoE
- Bandwidth10/100Mbps
- Short Circuit and Overload Protection
- Requires PoE Supply from NVR or Network Switch

Port	One RJ45 port for PoE input, one RJ45 port for PoE output
PoE Power Supply Mode	Powered via PoE input port, support Mid-Span and End-Span
Transmission Media	standard cat5e/6 or above
PoE Power Output	15.4W(max)
Bandwidth	10/100Mbps
Standard Compliance	IEEE802.3 10BASE-T/IEEE802.3u 100BASE-TX/100BASE-FX-7IEEE802.3az/IEEE802.3af
Working Status	PoE Indicator, Link/Act Indicator
Dimensions (L*W*H)	83.0mm x 51.5mm x 24.0mm
Weight	88.6g
Environment	
Working Temperature	-10° ~ 55° C
Storage Temperature	-40° ~ 85° C
Relative Humidity	5% ~ 95% (non-condensing)



**IPX100POE**  
PoE Extender



**CABIPCOUN**  
Data Cable Coupler

- Data Cable Coupler with RJ45 Ports

- For use with IP PTZ Cameras
- Keyboard for Programming and Camera Control
- Integrated LCD Display
- Powered VIA 12V or PoE

Protocol	Onvif
Maximum Supported Devices	999
Supported Decoding Formats	H.265 & H.265
Power Supply	DC12V-2A
PoE Compatible	Yes
Power Consumption	<5W
Operating Temperature	-10° C ~ 55° C
Dimensions	118.7mm x 297mm x 210mm



**HDVIPCPTZC**  
IP Pan, Tilt, and Zoom Controller





**CPS9** 9 WAY 9 AMP BOXED POWER SUPPLY  
**CPS16** 16 WAY 16 AMP BOXED POWER SUPPLY

- 12VDC power limited output
- Protected outputs
- 100VAC-240VAC (50/60Hz) universal input
- Filtered and electronically regulated output
- Short circuit and thermal overload protection
- AC input and DC output LED indicators
- CPS4 dimensions 182(W) x 260(H) x 66(D)mm
- CPS9 dimensions 322(W) x 322(H) x 86(D)mm
- CPS16 dimensions 322(W) x 322(H) x 86(D)mm



**CPS9W** 9 WAY 12VDC 5AMP CCTV POWER SUPPLY  
**CPS18W** 18 WAY 12VDC 10AMP CCTV POWER SUPPLY

- 100VAC-240VAC (50/60Hz) universal input
- 1.1A Automatic PTC fuse per output
- Surge & short circuit protection
- Internal on/off power switch
- AC input and DC output LED indicators
- Individual LED indicators per output



**SHDVCDBG** Grey Camera Deep Base  
**SHDVCDBW** White Camera Deep Base

- IP66 Rated
- Metal Construction
- 25mm Cable Entry
- Suitable for HDview 4 Megapixel Range:  
SHDVC36FBG, SHDVC2812VFBG, SHDVC36FDG,  
SHDVC36FBW, SHDVC2812VFBW, SHDVC36FDW
- Dimensions: Ø112.5 x 50(H)mm



**SHDVCDBLG** Large Grey Camera Deep Base  
**SHDVCDBLW** Large White Camera Deep Base

- IP66 Rated
- Metal Construction
- 25mm Cable Entry
- Suitable for HDview 4 Megapixel Range:  
SHDVC622VFBG, SHDVC550VFBG, SHDVC2812VFDG,  
SHDVC622VFBW, SHDVC550VFBW, SHDVC2812VFDW
- Dimensions: 145(W) x 145(H) x 53(D)mm



**PSIL1W**  
CAMERA POWER SUPPLY

- For use with CCTV Cameras
- 12 volt
- 1 amp



**TFT-BRA1**  
Fixed Monitor Bracket

- Closest to wall fit
- Picture style finish
- To fit screens 12-28" (30-71cm)
- Supports 20kg (44lbs)



**TFT-BRA2**  
Tilt, Pivot & Rotate Monitor Bracket

- 27° tilt 180° swivel
- Close to wall fit
- To fit screens 12-28" (30-71cm)
- Supports 20kg (44lbs)



**TFT-BRA4**  
CCTV Monitor VESA Mount Bracket Black

- 15° Tilt
- Close to wall fit
- To fit screens up to 47"
- Supports up to 25kg
- VESA Compatibility up to 200mm x 200mm



**PTZCBRKT**  
PTZ Camera Corner Bracket

- Compatible with external PTZ range
- Improves PTZ viewing coverage
- Metal construction
- White finish



**DUAL FUNCTION,  
POWER & BNC CABLES**

- CAB-10 - 10m Power and BNC Video Cable
- CAB-20 - 20m Power and BNC Video Cable
- CAB-40 - 40m Power and BNC Video Cable
- CAB-80 - 80m Power and BNC Video Cable



**HDBALUNV**  
Single Channel HD Passive Balun

- AHD camera transmission over CAT5 cable
- Single Channel HD Passive Balun
- Transmitter and Receiver pack
- Compatible with AHD and analogue CCTV cameras



**HDBALUNVP**  
Single Channel HD Video & Power Balun

- AHD camera transmission and power over CAT5 cable
- Single Channel HD Video & Power Balun
- Transmitter and Receiver pack
- Compatible with AHD and analogue CCTV cameras



**DVRWLA**  
Wireless USB Network Adaptor

- Enables DVR Wi-Fi connection
- Up to 150mbps wireless transmission
- 4 types of encryption supported
- Compact design



**TMPROSHD**  
CCTV Test Monitor

- Compatible with standard definition, 720P, 1080P & 4 Megapixels CCTV cameras
- Durable design with quality carry case
- 4" LCD Touchscreen
- 12vDC 1A power output for Camera
- Lithium battery rechargeable (7 hrs working time)
- PTZ Camera control and testing



**HDBALUNVPCT**  
Single Channel HD Video & Power Transmitter Balun

- AHD camera transmission and power over CAT5 cable
- Single Channel HD Video & Power Transmitter Balun
- Compatible with AHD and analogue CCTV Cameras



**WARN**  
CCTV Large Yellow Warning Sign

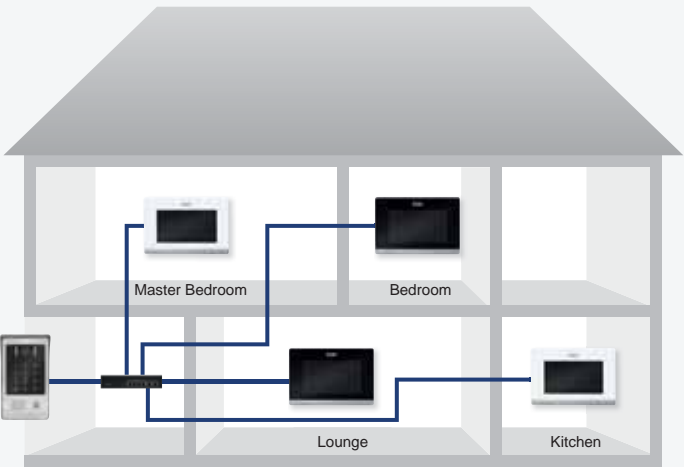
- Large External CCTV Signage
- Clear Bold Writing
- 2 Empty Fields for Personalisation
- 4 Pre-Drilled Holes for Mounting

A photograph of a modern house entrance. The house has a white exterior wall and a dark grey door with a vertical glass panel. A video door entry system is installed on the door. The entrance is framed by a dark grey overhang. To the left of the door is a large green tree and a small grey light fixture. To the right of the door is a wooden slatted wall and a potted plant. The sky is blue.

# ACCESS CONTROL

A complete and flexible range of superb quality video door entry equipment. Simple installation and high performance in colour – with the option of call points with integral PIN access – means you need look no further to find the ideal video door entry solution.

aperta 



SINGLE WAY IP SYSTEM EXAMPLE COMPONENTS



A1IPVDS  
Single Way IP  
Door Station



A1IPMW  
7" HD Touch Screen Monitor



A1IPMB  
7" HD Touch Screen Monitor



POE Switch

Discover a new range of IP PoE communication. Aperta IP kits provide a simple, stylish and reliable solution all in one box. The outstation and monitor combine to produce; HD video, duplex audio, and ClickSmart+ APP integration for video and access applications. Whilst installation is made straight forward by utilizing the latest in PoE (Power over Ethernet) technology.

- Simple IP PoE installation
- HD Video & Full Duplex Audio
- IP65 Ingress Protection
- Built in Keypad & Proximity Reader

A1IPT10 Pack of 10 13.56MHz Tags



Horizontal Viewing Angle	110°
Audio	Full Duplex
Illumination	5 LEDs
Power	PoE & DC 15V1A
Code Length	6
Fob Reader Frequency	Built-In 13.56MHz Card Reader
Lock Outputs	DC12V, N/O & N/C Volt-Free Clean Contacts
Materials	Aluminium Alloy
Dimensions	150mm x 84mm x 33mm
Ingress Protection	IP65



A1IPVDS  
IP PoE IP65 SingleWay Outdoor Station

- Simple IP PoE installation
- User Friendly Touch Screen GUI Monitor & Outdoor Station Included
- HD Live 7" Video & Full Duplex Audio
- Clicksmart+ APP integration with Ethernet & Wi-Fi Connectivity

A1IPT10 Pack of 10 13.56MHz Tags

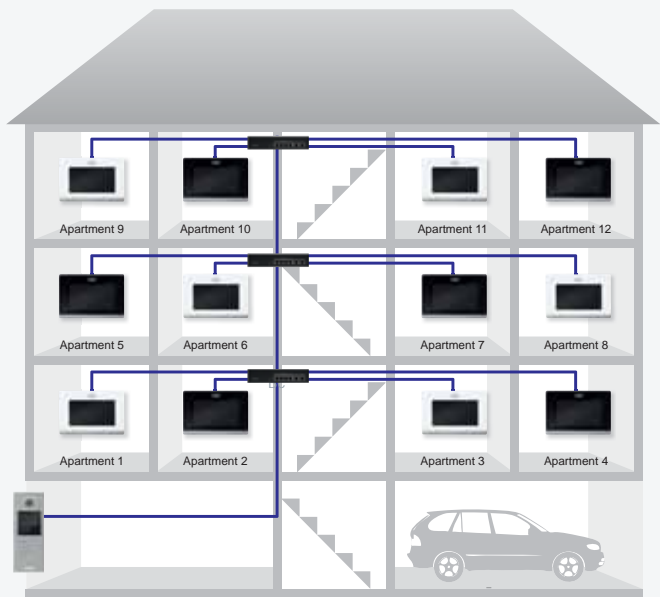


A1IPVDS	
Horizontal Viewing Angle	110°
Audio	Full Duplex
Illumination	5 LEDs
Power	PoE & DC 15V1A
Code Length	6
Fob Reader Frequency	Built-In 13.56MHz Card Reader
Lock Outputs	DC12V, N/O & N/C Volt-Free Clean Contacts
Materials	Aluminium Alloy
Dimensions	150mm x 84mm x 33mm
Ingress Protection	IP65

A1IPMW	
Display	7" TFT LCD
Audio	Full Duplex
Adjustment Type	Touchscreen
Power	PoE & DC 15V1A
Storage Type	MicroSD Card (Supports up to 32GB)*
Maximum Wiring Distance	Point-to-point: 100m (CAT5e)
Materials	Polycarbonate & Aluminium
Dimensions	151mm x 226mm x 20.5mm



Black A1IPKB White A1IPKW  
IP PoE Single Way Kit



MULTI WAY IP SYSTEM EXAMPLE COMPONENTS



A1IPDSM1  
Multi Way IP  
door station



A1IPMW  
7" HD Touch Screen Monitor



A1IPMB  
7" HD Touch Screen Monitor



POE Switch

A flexible range of superb quality hands-free IP colour video door entry products specifically for installation in large complexes. Simplicity of installation is the key to Aperta multi way systems, with a capacity to accommodate over 200 users while maintaining high performance. The keypad multi way door station allows both apartment calling plus door unlocking by passcode, no need for 2 separate keypads.

- Simple IP PoE installation
- HD Video & Full Duplex Audio
- IP65 Ingress Protection
- Built in Keypad & Proximity Reader
- User Friendly 4" GUI Display

A1IPT10 Pack of 10 13.56MHz Tags



Horizontal Viewing Angle	90°
Audio	Full Duplex
Illumination	5 LEDs
Power	PoE & DC 15V1A
Code Length	6
Fob Reader Frequency	Built-In 13.56MHz Card Reader
Lock Outputs	DC12V, N/O & N/C Volt-Free Clean Contacts
Materials	Aluminium Alloy
Dimensions	365mm x 140mm x 50mm
Ingress Protection	IP65



A1IPDSM1  
IP PoE IP65 Multi Way Outdoor Station

- Simple IP PoE installation
- HD Live 7" Video & Full Duplex Audio
- Optional Video Recordings and Playback of Callers
- User Friendly Touch Screen GUI Monitor
- Clicksmart+ APP integration with Ethernet & Wi-Fi Connectivity



Black A1IPMB

White A1IPMW  
IP PoE Monitor

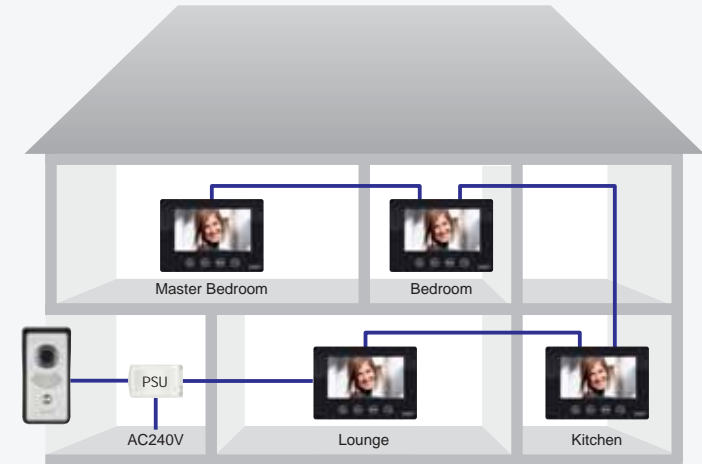
Display	7" TFT LCD
Audio	Full Duplex
Adjument Type	Touchscreen
Power	PoE & DC 15V1A
Storage Type	MicroSD Card (Supports up to 32GB)*
Maximum Wiring Distance	Point-to-point: 100m (CAT5e)
Materials	Polycarbonate & Aluminium
Dimensions	151mm x 226mm x 20.5mm



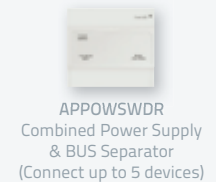
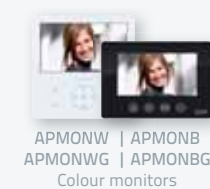


Introducing the next generation of Access Control products from ESP®.

The new Aperta range not only includes proximity reader systems and accessories such as magnetic door locks but also a completely new simplified and easy to install video door entry systems for both single house and multi way apartment applications.



#### SINGLE WAY SYSTEM EXAMPLE COMPONENTS



A flexible range of superb quality hands-free colour video door entry products specifically for installation in single dwellings. Simplicity of installation is the key to Aperta single way systems, requiring only 2 wires throughout and all outdoor stations and monitors powered by a single power supply.

The range includes 2 quick and easy to select base kits with options for combined keypad entry or a stylish but simple bell push outdoor station. Alternatively you can build your own system from 2 outdoor station and 4 monitor options. You really need look no further to find the ideal single way video door entry solution.





**APKIT** C/W White Monitor  
**APKITBLK** C/W Black Monitor  
 Colour Video Door Entry System

- Simple 2 core cable installation
- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices
- Clear high resolution colour picture on 7" hands free TFT monitor

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C ~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g



C/W White Monitor **APKITG**  
 C/W Black Monitor **APKITGBLK**  
 Colour Video Door Entry System with Record Facility

- Simple 2 core cable installation
- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices
- Clear high resolution colour picture on 7" hands free TFT monitor

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C ~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g



**APKITKP** C/W White Monitor  
**APKITKPBLK** C/W Black Monitor  
 Colour Video Door Entry Keypad System

- Simple 2 core cable installation
- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices
- Clear high resolution colour picture on 7" hands free TFT monitor
- Outdoor station with built in keypad for code door unlocking

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C ~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g

- Simple 2 core cable installation
- Single power supply (included) supports all monitors and outdoor stations in a flexible combination of up to 5 devices
- Clear high resolution colour picture on 7" hands free TFT monitor
- Outdoor station with built in keypad for code door unlocking

Station	
Image sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g
Monitor	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C ~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g



C/W White Monitor **APKITKP**  
 C/W Black Monitor **APKITKPBLK**  
 Colour Video Door Entry Keypad System with Record Facility



- Waterproof IP55 metal outdoor station
- High resolution colour Camera
- Built in keypad for door code unlocking
- Simple 2 core cable installation

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g

**APDSSWKP**  
Single Way Video Door Station with Keypad



- Flush mount kit for APDSMW, APDSSWKP and APDSPXMW

Bracket	
Frame Dimensions	126 (W) x 244 (H)
Mount box Dimensions	101 (W) x 210 (H) x 25 (D)
Weight	230g

**APDSKPFMS**  
Flush Mount Kit



- Waterproof IP55 outdoor station
- High resolution colour Camera
- Simple 2 core cable installation

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Power	24VDC
Operating Temp.	-20°C ~ +40°C
Dimensions	85mm(W)x 165mm(H)x 53mm(D)
Weight	390g

**APDSSW**  
Single Way Video Door Station



- Single Way system component
- 24VDC/800mA power output
- Dimensions 60mm(W)x90mm(H)x110mm(L)
- Only 1 power supply per system required

**APPOWSWDR**  
Combined Power & Bus Separator Unit  
for Single Way System



- Suitable for Single or Multi way installations
- Simple 2 core cable installation
- Clear two-way audio
- Lock release facility
- Magnetic receiver holster
- Durable white gloss casing

Handset	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	200mA
Dimensions	78mm(W)x245mm(H)x50mm(D)
Weight	315g

**APAUDH**  
Door Entry Handset



- Suitable for Single or Multi way installations
- Simple 2 core cable installation
- Clear two-way audio
- Lock release facility
- Magnetic receiver holster
- Durable black gloss casing

Handset	
Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	200mA
Dimensions	78mm(W)x245mm(H)x50mm(D)
Weight	315g

**APAUDHBLK**  
Door Entry Handset

- Simple 2 core cable installation
- 7" TFT screen with clear high resolution colour picture
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g



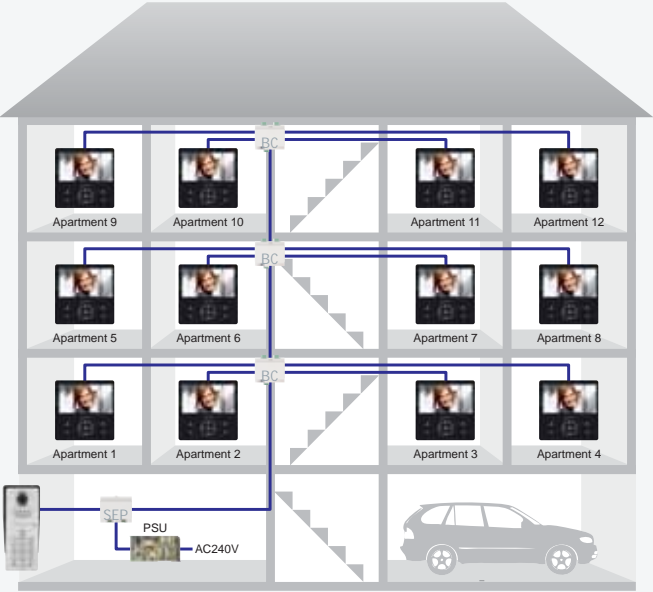
Black **APMONB**    White **APMONW**  
Colour Video Door Entry Monitor

- 7" TFT screen with clear high resolution colour picture
- Simple 2 core cable installation
- On screen menu for simple system set up & customisation
- Optional still or video recording and playback of callers (4GB SD card included)
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g



Black **APMONBG**    White **APMONWG**  
Colour Video Door Entry Monitor with  
Record Facility



MULTI WAY SYSTEM EXAMPLE COMPONENTS



APDSMW  
Multi Way  
door station



APMONW | APMONB |  
APMONWG | APMONBG  
Colour monitors



APBC4MW  
Branch Controller  
(A maximum of  
4 monitors to  
1 Branch controller)



APSEPMW  
Power BUS Separator  
(Connects to the System  
Power Supply and  
1st Branch controller)



APPOWMW  
System Power Supply

A flexible range of superb quality hands-free colour video door entry products specifically for installation in multiple apartments. Simplicity of installation is the key to Aperta multi way systems, supporting up to 32 apartments in one system and requiring only 2 wires throughout with all outdoor stations and monitors powered by a single power supply. The keypad multi way door station allows both apartment calling plus door unlocking by passcode, no need for 2 separate keypads.

The keypad apartment calling also means that no additional buttons or panels are required, keeping the installation simple, neat and compact. You really need look no further to find the ideal multi way door entry solution.

- Waterproof IP55 metal multi way outdoor station
- High resolution colour Camera
- Built in keypad for door calling and code unlocking
- Simple 2 core cable installation
- Supports up to 32 apartments (Address Numbers 1-32)

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Capacity	32 ID
Status Indication	Audio
Relay Operation	NO/NC
Working Temp.	-20° C ~ +40° C
Ingress Protection	IP55
Construction	Aluminium
Voltage	24VDC
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g



Multi Way Video Door Station **APDSMW**  
Multi Way Video Door Station with Custom Apartment Addresses **APDSMWSP1**

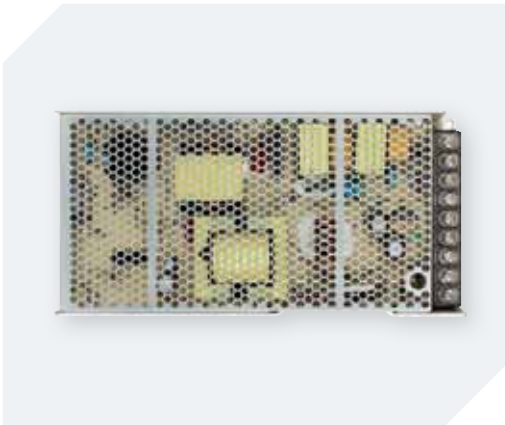
- Waterproof IP55 metal multi way outdoor station
- High resolution colour camera
- Simple 2 core cable installation
- Supports up to 32 apartments ( Address Numbers 1-32)
- Capacitive keypad for apartment calling, proximity & code unlocking
- Complete with 10 pre-registered user tags
- 10,000 user tags supported

EZT3ST10 Additional Proximity Tags (10 Pack) 

Image Sensor	1/3" Colour CCD
Min. Illumination	0.1 LUX
Illumination	6 LEDs
Lens	3.6mm
Viewing Angle	70°
Capacity	32 ID 10,000 Tags
Reader Frequency	125KHz
Effective Distance	<5CM
Status Indication	Audio
Relay Operation	NO/NC
Working Temp.	-20° C ~ +40° C
Ingress Protection	IP55
Construction	Aluminium
Voltage	24VDC
Dimensions	87mm(W)x 200mm(H)x 53mm(D)
Weight	640g



Multi Way Video Door Station **APDSPXMW**  
Multi Way Video Door Station with Custom Apartment Addresses **APDSPXMWSP1**



**APPOWMW**

Power Supply Unit For Multi Way System

- Multi Way system component
- 24VDC/4.2A power output
- Dimensions 100mm(W)x200mm(L)x40mm(D)
- Only 1 power supply per system required



**APSEPMW**

Power Bus Separator Unit For Multi Way System

- Multi Way system component
- For use with APPOWMW power supply



**APBC4MW**

4-Way Branch Controller For Multi Way System

- Multi Way system component
- 1 unit supports wiring to 4 apartments or 4 outdoor stations (APDSMW)

- Simple 2 core cable installation
- 7" TFT screen with clear high resolution colour picture
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C ~ +40°C
Consumption	300mA
Dimensions	215mm(W)x152mm(H)x18mm(D)
Weight	450g



Black **APMONB** White **APMONW**  
Colour Video Door Entry Monitor

- 7" TFT screen with clear high resolution colour picture
- Simple 2 core cable installation
- On screen menu for simple system set up & customisation
- Optional still or video recording and playback of callers (4GB SD card included)
- Durable white or black casing

Power	24VDC
Installation	Surface Mounted
Operational Temp.	0°C ~ +40°C
Consumption	350mA
Dimensions	183mm(W)x185mm(H)x20mm(D)
Weight	550g



Black **APMONBG** White **APMONWG**  
Colour Video Door Entry Monitor with Record Facility



APKITAO  
Audio Door Entry System

- Two-wire connection
- Durable/Weatherproof door station
- Clear 2 Way audio
- Lock release option
- Wiring distance up to 100 meters
- Easy DIY installation

Handset	
Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
Dimension	215mm x 85mm x 60mm
Call Point	
Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
IP rating	55
Dimension	150mm x 65mm x 50mm



APKITAOH  
Additional APKITAOH Audio Handset

Handset	
Input range	DC12V
Output power	<=0.6W
Working current	<=50mA
Dimension	215mm x 85mm x 60mm

- Full 2K (4MP) Live View & Recording
- No Subscription or Additional Fees Required
- 170° Wide Angle Camera View
- Motion or Human Activated Video Record
- Clear Two-Way Audio
- Supplied with Angle Bracket Kit
- Supports Alexa Dot Door Chime function and Mechanical Bell Converter
- IP65 Rated Ingress Protection
- Operates on 2.4GHz, 5 GHz Wi-Fi & Ethernet Network Connection
- Operating Temperature: -20 ~ +60°C

Sensor Size	1/1.9"
Lens	Field of View 170°
Resolution	1440p
Audio	Full Duplex
IR LED	5pcs
IR distance	5 Meters
Memory	128GB Max (8GB Supplied)
Construction	Polycarbonate
Ingress Protection	IP65
Connection	2.4GHz & 5GHz Wi-Fi
System Range	150 Meters to RFChime
Interface	Ethernet (VIA USB-C)
Power	8-24VAC or 5-30VDC
Weight	125g
Operating Temperature	-20°C ~ 60°C
Dimensions	115mm x 45mm x 25mm



APWIFIDS2K  
Wired 2K Wi-Fi Video Door Station with  
Record Facility

- Easy install, simple self-contained programming
- Up to 1,010 key tag holders or Pin numbers
- 2 separate user groups
- 2 relay outputs
- Anti tamper option
- Weather/dust proof robust construction IP65
- Complete with 10 tags

EZT3ST10 Additional Proximity Tags (10 Pack)



Capacity	Zone 1 : 1000 Card/ Tag Combination Zone 2 : 10 Card/ Tag Combination
Reader Frequency	125KHz
Effective Distance	<5CM
Status Indication	Red/ Green LED
Relay Operation	NO/NC: 4A@30VDC
Relay Duration	01-99sec
Working Temp.	-10 to +55°C
Ingress Protection	IP65
Construction	Aluminium
Voltage	DC: 12V-24V AC: 12V-24V
Working Current	<120mA
Standby Current	<90mA
Dimensions	150(H)x43(W)x23(D)



Silver **EZTAG3**      Black **EZTAG3B**  
Proximity and Keypad Door Entry





Complete entry system in one box comprising of:

- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- A1ML250 Aperta Internal IP20 250kg Holding Force Magnetic Lock with Lock Status LED & Contact c/w Z & L Bracket
- EVBPSBB Boxed Power Supply
- A1EXIT Aperta Flush Stainless Steel Exit button
- A1ECP Aperta Green Internal Emergency Call Point

**EZT3K** Silver      **EZT3KB** Black  
Aperta Single Door Internal Keypad Kit



Complete entry system in one box comprising of:

- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- A1ML250 Aperta Internal IP20 250kg Holding Force Magnetic Lock with Lock Status LED & Contact c/w Z & L Bracket
- EVBPSBB Boxed Power Supply
- EVEXITM Push to Exit Mushroom Button
- A1ECP Aperta Green Internal Emergency Call Point

**EZT3KM** Silver      **EZT3KMB** Black  
Aperta Single Door Internal Keypad Kit

Complete entry system in one box comprising of:

- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- A1ML250 Aperta Internal IP20 250kg Holding Force Magnetic Lock with Lock Status LED & Contact c/w Z & L Bracket
- EVBPSBB Boxed Power Supply
- EVEXITC Contactless Exit Button
- A1ECP Aperta Green Internal Emergency Call Point



**EZT3KC** Silver      **EZT3KCB** Black  
Aperta Single Door Internal Keypad Kit

Complete entry system in one box comprising of:

- EZTAG3 IP65 Proximity Door Entry Keypad
- EZT3ST10 Proximity Tags
- A1ML300XT Aperta External IP68 300kg Holding Force Magnetic Lock c/w Z & L Bracket
- EVBPSBB Boxed Power Supply
- EVEXITMIP55 IP55 Exit Button
- EVEBGEXT2 IP67 Green Emergency Call Point



**EZT3KXT** Silver      **EZT3KXTB** Black  
Aperta Single Door External Keypad Kit



UDTASMBSS

Assistance Alarm Surface Mount Box

### A1EXIT

#### Aperta Flush Exit Button

- Stainless Steel Exit Button
- Supports Both Normally Open & Normally Closed Installation
- Clear Wording
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)



UDTASMBSS

Assistance Alarm Surface Mount Box

### EVEXITC

#### Contactless Exit Button

- Contactless Exit Button
- Normally Open & Closed Contacts
- Worded 'Exit' & 'No Touch'
- DC12V Input
- 12-28V, 3A Rated Contact
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)
- 86mm x 86mm x 29mm
- 0.25kg



### EVTR

#### Trades Button

- Stainless Steel Trades Entrance Button
- IP66 Ingress Protected Push Button
- Normally Open & Closed Contacts (Timer Supplied Separately)
- Clear Wording
- Single Gang Fascia Including Surface Mount Box and Security Screws
- 88 x 88 x 43mm (inc. Surface box)
- 315g



### EVTRT

#### Trades Button with Timer

- Stainless Steel Trades Entrance Button with DIN Timer
- IP66 Ingress Protected Push Button
- DIN Timer (Sangamo part: 71111)
- Normally Open & Closed Contacts
- Clear Wording
- Single Gang Fascia Including Surface Mount Box and Security Screws



UDTASMBSS

Assistance Alarm Surface Mount Box

### EVEXITM

#### Push to Exit Mushroom Release Button

- Large mushroom exit button
- Normally open & closed contacts
- Clear wording
- Stainless steel fascia (Surface mount box part code: UDTASMBSS)
- 87.5 x 87.5 x 35mm
- 173g



### EVEXITMIP55

#### Push to Exit Mushroom Release Button IP55

- Large mushroom exit button
- IP55 Ingress protection
- Normally open & closed contacts
- Clear wording
- Robust housing (Includes surface mount box)
- 85m x 80mm x 85mm
- 200g

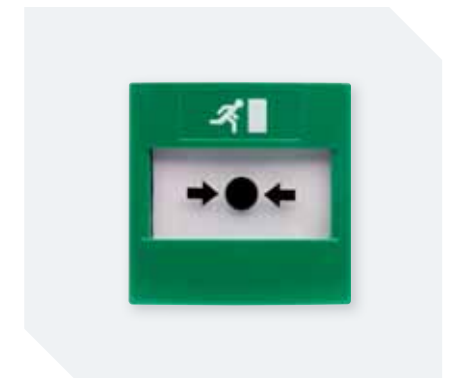


### A1ECP

#### Aperta Internal Green Call Point

- RAL6016 Green Emergency Call Point
- Resettable Frangible Element
- DPDT Relays Included
- Clear Wording
- Flush or Surface Mount (Surface Backbox Included)

**A1ECPKEY** Pack of 5 Keys for A1ECP  
**A1ECPCVR** Pack of 5 Covers for A1ECP



### EVEBGEXT2

#### Callpoint DPDT IP67 Green

- Surface Mounted
- Green Emergency Call Point to Release Door
- IP67 Ingress Protected Weather Resistant
- Normally Open & Normally Closed
- 3 x 20mm Knockouts

**EVEBGEXT2KEY** Callpoint DPDT IP67 Green Keys



**EVBPSBB**  
Boxed Power Supply

- 100-240vAC, 50/60Hz input
- 1.5A / 12vDC fail safe/secure output
- 1A 12vDC output
- Backup battery facility (Requires Battery)
- Size: 129 x 73 x 50mm LWD



**BAT7**  
12V - 7.0ah SLA Battery

- Back up battery for EVBPSBB, MAG2P, MAG2, MAG4P and MAG4



**A1ML250**  
Aperta 250kg Internal Maglock

- Holding Force 250kg
- Z & L Mounting Brackets Included
- Supports both 12 & 24 V DC Operating Voltage
- Fail Safe



**A1ML250ZL**  
Z&L Bracket for A1ML250

- Replacement Z & L Brackets for use with A1ML250



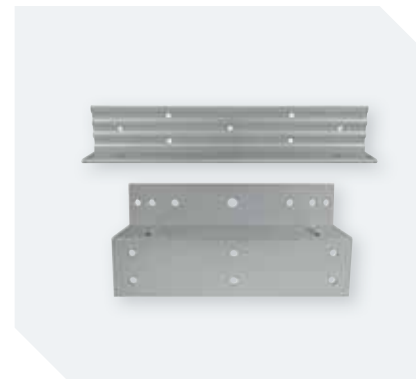
**A1SL**  
Aperta Flush Strike Lock

- Holding Force 400kg
- 240mA 12V DC Input
- For use with Yale Type Rim Locks
- Fail Secure
- Surface Mount Version Available



**A1SLS**  
Aperta Surface Strike Lock

- Holding Force 400kg
- 240mA 12V DC Input
- For use with Yale Type Surface Locks
- Fail Secure
- Flush Mount Version Available



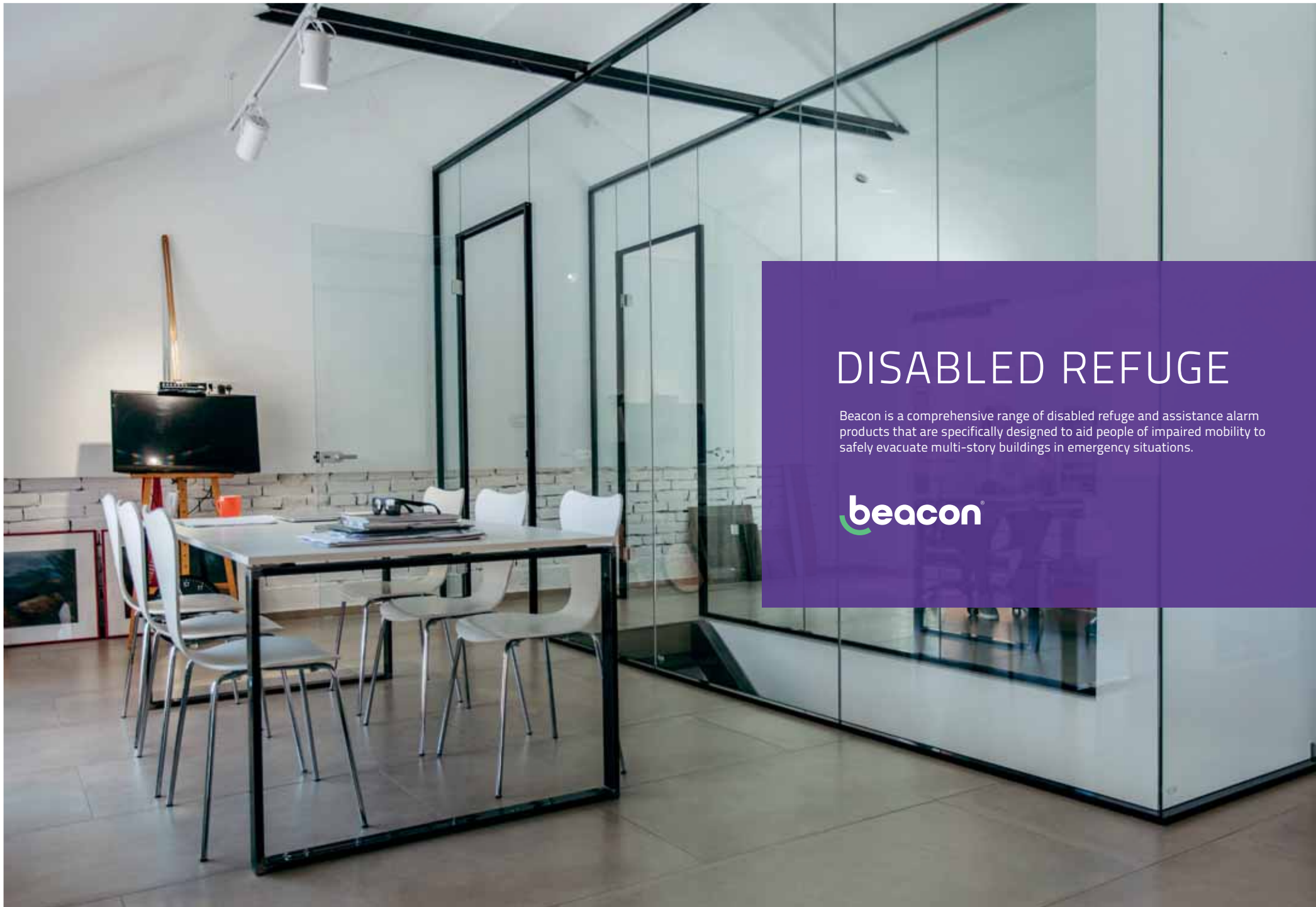
**EV-ML-250ZLB**  
Z&L Bracket for EV-ML-250

- Spare Z and L bracket for EV-ML-250



**A1ML300XT**  
Aperta 300kg External Maglock

- IP68 Weather Resistant External Lock
- Holding Force 300kg
- Z & L Mounting Brackets Included
- Supports both 12 & 24 V DC Operating Voltage
- Fail Safe



# DISABLED REFUGE

Beacon is a comprehensive range of disabled refuge and assistance alarm products that are specifically designed to aid people of impaired mobility to safely evacuate multi-story buildings in emergency situations.

 **beacon**



**B1M2**  
2 Line Master Station

- Large Handset for Full Duplex Audio
- Simple System Interface
- Intergrates; Assist Call, Type A and B Outstations
- Backup Battery (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300

**BMSF** Flush Bezel for Master Station



**BM2EX** 2 Line Expansion Card for Master Station



Inputs	
Lines	2; in 1 of 2-line block
End of Line	10KΩ
Outputs	
Number of outputs	2; Fault & in-use
Type	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 350mm x 95mm
Weight	5Kg

- Large Handset for Full Duplex Audio
- Simple System Interface
- Intergrates; Assist Call, Type A and B Outstations
- Backup Battery (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300

**BMSF** Flush Bezel for Master Station



Inputs	
Lines	8; in 4 of 2-line block
End of Line	10KΩ
Outputs	
Number of outputs	2; Fault & in-use
Type	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 350mm x 95mm
Weight	5Kg



**B1M8**  
8 Line Master Station



**B1M4**  
4 Line Master Station

- Large Handset for Full Duplex Audio
- Simple System Interface
- Intergrates; Assist Call, Type A and B Outstations
- Backup Battery (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300

**BMSF** Flush Bezel for Master Station



**BM2EX** 2 Line Expansion Card for Master Station



Inputs	
Lines	4; in 2 of 2-line block
End of Line	10KΩ
Outputs	
Number of outputs	2; Fault & in-use
Type	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 350mm x 95mm
Weight	5Kg

- 512 Line Capability, requires BMNETEX Expander Every 8 Lines
- 4.3" Full Colour Touchscreen
- Large Handset for Full Duplex Audio
- Simple System Interface
- Integrates; Assist Call, Type A and B Outstation
- Backup Battery Features (Battery not inc.)
- Fully Compliant to BS5839-9:2021 & BS8300

**BMSF** Flush Bezel for Master Station



Inputs	
Lines	8; in 4 of 2-line block
End of Line	10KΩ
Outputs	
Number of outputs	2; Fault & in-use
Type	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (±10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 350mm x 95mm
Weight	5Kg



**BMNET**  
Touchscreen Master Station



**BMNETEX**  
Touchscreen Master Station Expander

- Expands a BMNET Network by 8 Lines
- Simple System Interface
- Integrates; Assist Call, Type A and B Outstations
- Backup Battery Feature (BAT7 Required)
- Fully Compliant to BS5839-9:2021 & BS8300

Inputs	
Lines	2; in 1 of 2-line block
End of Line	10KΩ
Outputs	
Number of outputs	2; Fault & in-use
Type	Volt-free relay
Contact Rating	30V DC 1A
Power	
Operating Voltage	230VAC (+10%), 50/60Hz
Battery Type	12V 7Ah SLA (not included)
Internal Supply	5V, 16V, 27V DC
Environment	
Dimensions	300mm x 220mm x 95mm
Weight	3Kg

- High Quality Duplex Audio and High-Volume Ringer
- Brushed Stainless Steel Housing in Steel
- Large Handset
- LED Call Status
- Fully Compliant to BS5839-9:2021

Outstation Type	A
Material	Stainless Steel
Environment	
Dimensions	300mm x 150mm x 105mm
Weight	1400g



**BTAS Silver**      **BTAR Red**  
Fire Telephone Type A Outstation



**BRAP**  
Remote Alarm Panel for Master Station

- Compatible with Beacon Master Stations
- High Volume Sounder with Volume Control
- Flush or Surface Mount (2 Gang Mount Box Not inc.)
- Stainless Steel
- Fully Compliant to BS5839-9:2021

Power	
Operating Voltage	230V AC
Environment	
Dimensions	86mm x 146mm x 27mm
Weight	600g

- High Quality Duplex Audio and High-Volume Ringer
- Robust IP66 Ingress Protected Housing
- Large Handset
- LED Call Status
- Fully Compliant to BS5839-9:2021

Outstation Type	A
Material	Stainless Steel
Colour	Red
Environment	
Ingress Protection	IP66
Dimensions	300mm x 150mm x 130mm
Weight	2800g



**BTA66**  
Fire Telephone Type A Outstation IP66





**BTB**  
Disabled Refuge Type B  
Outstation

- High Quality Duplex Audio and High-Volume Ringer
- Brushed Stainless Steel
- Handsfree Call Operation with LED Call Status
- Flush or Surface Mount (2 Gang Mount Box Not inc.)
- Fully Compliant to BS5839-9:2021

Outstation Type	B
Material	Stainless Steel
Colour	Green
Environment	
Dimensions	146mm x 86mm x 22mm
Weight	400g



**B1TB**  
Disabled Refuge Type B  
Outstation Green

- High Quality Duplex Audio and High-Volume Ringer
- Green Polycarbonate
- Handsfree Call Operation with LED Call Status
- Flush or Surface Mount (2 Gang Mount Box Not inc.)
- Fully Compliant to BS5839-9:2021

Outstation Type	B
Material	Polycarbonate
Colour	Green
Environment	
Dimensions	146mm x 86mm x 22mm
Weight	400g



**BTB66**  
Disabled Refuge Type B  
Outstation IP66

- High Quality Duplex Audio and High-Volume Ringer
- Robust IP66 Ingress Protected Housing
- Handsfree Call Operation
- LED Call Status
- Fully Compliant to BS5839-9:2021

Outstation Type	B
Material	Stainless Steel
Colour	Green
Environment	
Ingress Protection	IP66
Dimensions	200mm x 200mm x 130mm
Weight	2800g

- Includes 1x BAPCM 1x BAM 1x BACM
- High Volume Sounder and LED Indication
- Requires Master Station, Expander or BA4ZM
- Flush or Surface Mount (1 Gang Mount Boxes Not inc.)
- Fully Compliant to BS8300

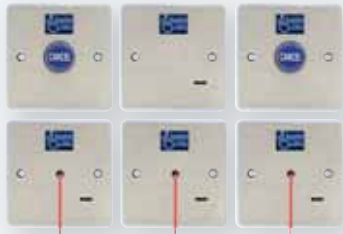
Material	Stainless Steel & Acrylic
Environment	
Dimensions	86mm x 86mm x 22mm
Weight	600g

- Includes 3x BAPCM 2x BAM 1x BACM
- High Volume Sounder and LED Indication
- Requires Master Station, Expander or BA4ZM
- Flush or Surface Mount (1 Gang Mount Boxes Not inc.)
- Fully Compliant to BS8300

Material	Stainless Steel & Acrylic
Environment	
Dimensions	86mm x 86mm x 22mm
Weight	600g



**BAKIT**  
Assist Call Kit



**BABEDKIT**  
Assist Call Bedroom Kit



#### BA4ZM

##### Assist Call 4 Zone Module

- Connect 4 Assist Call Kits
- Brushed Stainless Steel Finish
- Requires BA4ZMPS (Power Supply)
- Flush or Surface Mount (2 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



#### BA4ZMPS

##### Assist Call 4 Zone Module PSU

- Brushed Stainless Steel Finish
- Flush or Surface Mount (2 Gang Mount Box Not inc.)



#### BAM

##### Assist Call Alert Module

- High Volume Sounder and LED Indication
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



#### BACM

##### Assist Call Cancel Module

- Visual LED Indication and Braille Cancel Button
- Brushed Stainless Steel Finish
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



#### BAPCM

##### Assist Call Pull Cord Module

- Red Pull Cord inc. 2x Pull Rings
- Brushed Stainless Steel Finish
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300



#### BAIM

##### Assist Call Input Module

- Provides a Switch for 3rd Party Devices
- Brushed Stainless Steel Finish
- Flush or Surface Mount (1 Gang Mount Box Not inc.)
- Fully Compliant to BS8300

#### BACM66

##### Assist Call Cancel Module IP66

- IP66 Ingress Protected Alarm Cancel Plate
- Brushed Stainless Steel Fascia
- Surface Mount Box Included
- Fully Compliant to BS8300



#### BACALM66

##### Assist Call Module IP66

- IP66 Ingress Protected Alarm Call Plate
- Brushed Stainless Steel Fascia
- Surface Mount Box Included
- Fully Compliant to BS8300



#### BAMCALM56

##### Assist Call Mushroom Call Module IP56

- IP56 Ingress Protected Alarm Call Plate
- Polycarbonate Construction
- Surface Mount Box Included
- Not for use with a Cancel Plate
- Fully Compliant to BS8300





## UDTAKIT

### Assistance Alarm Kit

- Simple install, 3 part kit - Indication Module, Pull cord module & Reset Module
- Complete with battery back-up function (Battery Included)
- Meets Part M building regulations and BS8300
- Antimicrobial properties
- Alarm to raise alert for assistance
- Compact design to suit many interiors
- Supplied with disabled persons sign
- All modules supplied with single gang back box
- System is expandable to include additional indication and pull cord modules if required



## UDTALBM

### Assistance Alarm Light and Buzzer Module

- For use with UDTA Kit
- Clear alarm LED alert
- 80db distinctive audible alert
- Antimicrobial properties
- Compete with surface back box

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm



## UDTAPCM

### Assistance Alarm Pull Cord Module

- For use with UDTA Kit
- Clear alarm LED alert
- Distinctive red 10ft pull cord
- Pull cord complete with anti-ligature mechanism
- 2 Pull handles supplied
- Antimicrobial properties
- Compete with surface back box

Input Voltage	12VDC
Power Consumption	0.3W max.
Indicator	LED illuminate in red when system triggered
Pull Cord Length	3 meters, with two triangular bangles
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm

## UDTAPLBM

### Assistance Alarm Power Light Buzzer Module

- For use with UDTA Kit
- Clear alarm LED alert
- 80db distinctive audible alert
- 240vac Input for system power
- Complete with battery back-up function (Battery Included)
- Antimicrobial properties
- Compete with surface back box

Input Voltage	AC100 – 240V / 50Hz – 60Hz / 0.2A
Rated Output	DC12V / 500mA max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm



## UDTAREM

### Assistance Alarm Reset Module

- For use with UDTA Kit
- Clear alarm LED alert
- Distinctive audible alert
- Reset system function
- Antimicrobial properties
- Compete with surface back box

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm



## UDTASPC

### Assistance Alarm Replacement Pull Cord

- For use with UDTAKIT pull cord module
- Includes; red cord, 2 handles & magnetic coupler





UDTAKITSS

Assistance Alarm Alarm Kit

- Simple install, 3 part kit - Indication Module, Pull cord module & Reset Module
- Complete in a stainless steel finish
- Complete with battery back-up function (Battery Included)
- Meets Part M building regulations and BS8300
- Alarm to raise alert for assistance
- Compact design to suit many interiors
- Disabled persons stainless steel door sign
- System is expandable to include additional indication and pull cord modules

UDTAPLBMSS

Assistance Alarm Power Light Buzzer Module

- For use with UDTAKITSS
- Clear alarm LED alert
- 80db distinctive audible alert
- 240vAC Input for system power
- Complete with battery back-up function (Battery Included)
- Stainless steel finish

Input Voltage	AC100 – 240V / 50Hz – 60Hz / 0.2A
Rated Output	DC12V / 500mA max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm



UDTALBMSS

Assistance Alarm Light and Buzzer Module

- For use with UDTAKITSS
- Clear alarm LED alert
- 80db distinctive audible alert
- Stainless steel finish

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm

UDTAREMSS

Assistance Alarm Reset Module

- For use with UDTAKITSS
- Clear alarm LED alert
- Distinctive audible alert
- Reset system function
- Stainless steel finish

Input Voltage	12VDC
Power Consumption	0.9W max.
Indicator	LED illuminate in red when system triggered
Buzzer	85db when activated
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm



UDTAPCMSS

Assistance Alarm Pull Cord Module

- For use with UDTAKITSS
- Clear alarm LED alert
- Distinctive red 10ft pull cord
- Pull cord complete with anti-ligature mechanism
- 2 Pull handles supplied
- Stainless steel finish

Input Voltage	12VDC
Power Consumption	0.3W max.
Indicator	LED illuminate in red when system triggered
Pull Cord Length	3 meters, with two triangular bangles
Dimensions	Single Gang / (W) 87 x (L) 87 x (H) 41mm

UDTASMBSS

Assistance Alarm Surface Mount Box

- For use with UDTAKITSS Modules



UDTASPC Assistance Alarm Replacement Pull Cord



# FIRE PROTECTION

The ESP® fire systems have been created to balance performance, reliability and aesthetics whilst being fully CPR compliant and certified to EN54 standards. The range includes everything required to complete high quality, durable, two wire, conventional and addressable fire alarm installations.

**MAGDUO**

**MAGfire**

**CPR**  
COMPLIANT

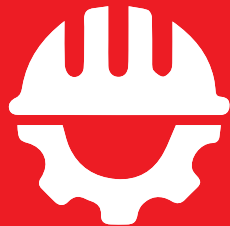






## FIRE SYSTEM COMMISSIONING

Alongside ESP's extensive range of fire protection systems, a new commissioning service has now been launched to ensure that an installed ESP® system operates correctly in accordance with the recommendations of BS5839-1.



## SYSTEM DESIGN

ESP® can offer a team of dedicated design engineers who are fully trained & qualified in all of the relevant British Standards.

We are able to provide an in-depth solution to any challenge your building may provide, this is done by visiting sites and studying site drawings.

All of our Computer Aided Design (CAD) is carried out in-house, this enables us to amend our designs as the job progresses.





### MAGDUO2BKIT

#### 2 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO2B 2 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool



### MAGDUO2KIT

#### 2 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO2 2 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool



### MAGDUO4BKIT

#### 4 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO4B 4 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool

### MAGDUO4KIT

#### 4 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO4 4 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool



### MAGDUO8BKIT

#### 8 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO8B 8 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool



### MAGDUO8KIT

#### 8 Zone Two Wire Conventional Fire Alarm Kit

- MAGDUO8 8 zone Two Wire fire panel (Requires 2 x 12v 3.2ah SLA Batteries)
- 6 x MAGDUOSHDS Selectable optical smoke / heat detectors with inbuilt sounders & bases included
- 1 x MAGDUOSHSS Selectable optical smoke / heat detectors with inbuilt sounder & strobe, base included
- 2 x MAGDUOCP Resettable call points
- 1 x MAGDUOSHDRT Head removal tool



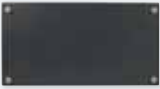


MAGDUO2 Grey    MAGDUO2B Black  
2 Zone Two Wire Fire Panel

- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading Unit: DLU)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- Certified to EN54 2/4 Standards
- Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries



Inputs	
Max Detectors Per Zone	Up to 32 Devices (Dependant on Device Loading Units , 160 per Zone)
Power	
Mains Supply	230VAC, +10%, -15%, 50/60Hz
Operating Voltage	24vDC (Range 21-31vDC)
Standby Supply	2 x 12V 3.2Ah S.L.A Battery
Outputs	
Zone	Up to 2 (300mA)
Monitored Sounder Circuits	Up to 2 (250 mA)
Monitored Relay Circuits	Up to 2 (250 mA)
Auxiliary Output	24vDC (300mA)
Environment	
Working Temperature	5°C to 40°C
Dimensions	333 x 333 x 99mm
Weight	2.25 Kg



MAGDUOBBB  
Battery Expansion Box for MAGDUO



MAGDUOPK (Pack of 2)  
Two Wire Fire Panel Spare Key



MAGDUOPCPS  
MAGDUO Software

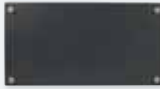


MAGDUO4 Grey    MAGDUO4B Black  
4 Zone Two Wire Fire Panel



- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading Unit: DLU)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- RS485 connection to up to 8 repeater panels
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- 4 or 8 zone panel can now be configured to accept conventional devices on zones 5 to 8 with the optional conventional zone card
- Certified to EN54 2/4 Standards
- Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries

Inputs	
Max Detectors Per Zone	Up to 32 Devices (Dependant on Device Loading Units , 160 per Zone)
Power	
Mains Supply	230VAC, +10%, -15%, 50/60Hz
Operating Voltage	24vDC (Range 21-31vDC)
Standby Supply	2 x 12V 3.2Ah S.L.A Battery
Outputs	
Zone	Up to 4 (300mA)
Monitored Sounder Circuits	Up to 2 (250 mA)
Monitored Relay Circuits	Up to 2 (250 mA)
Auxiliary Output	24vDC (300mA)
Environment	
Working Temperature	5°C to 40°C
Dimensions	333 x 333 x 99mm
Weight	2.28 Kg



MAGDUOBBB  
Battery Expansion Box for MAGDUO



MAGDUOPK (Pack of 2)  
Two Wire Fire Panel Spare Key



MAGDUOPCPS  
MAGDUO Software



MAGDUO8 Grey MAGDUO8B Black  
8 Zone Two Wire Fire Panel

- Two Wire fire alarm system
- Active end of line monitoring and head removal
- Up to 32 devices per zone (Dependent on Device Loading Unit: DLU)
- 4 line x 20 character LCD display
- Ability to differentiate between smoke detector, heat detector or a manual call point alarms
- Alarm confirmation feature
- RS485 connection to up to 8 repeater panels
- Event log storing up to 500 events
- 3 enhanced test modes
- Zone can be configured to day/night detection mode
- Delay programming options
- 4 or 8 zone panel can now be configured to accept conventional devices on zones 5 to 8 with the optional conventional zone card
- Certified to EN54 2/4 Standards
- Requires 2 x 12V 3.2Ah batteries (BAT32)
- Optional extended battery box with capacity for 2 x 12V 7.0Ah batteries



Inputs	
Max Detectors Per Zone	Up to 32 Devices (Dependant on Device Loading Units , 160 per Zone)
Power	
Mains Supply	230VAC, +10% , -15%, 50/60Hz
Operating Voltage	24vDC (Range 21-31vDC)
Standby Supply	2 x 12V 3.2Ah S.L.A Battery
Outputs	
Zone	Up to 8 (300mA)
Monitored Sounder Circuits	Up to 2 (250 mA)
Monitored Relay Circuits	Up to 2 (250 mA)
Auxiliary Output	24vDC (300mA)
Environment	
Working Temperature	5° C to 40° C
Dimensions	333 x 333 x 99mm
Weight	2.36 Kg



MAGDUOBBB  
Battery Expansion Box for MAGDUO



MAGDUOPK (Pack of 2)  
Two Wire Fire Panel Spare Key



MAGDUOPCPS  
MAGDUO Software



MAGDUOREP Grey MAGDUOREPB Black  
Conventional Repeater Panel for MAGDUO

- Compatible with MAGDUO 4 or 8 zones control panels only
- Reports MAGDUO panel events to a remote location
- Capable of performing system controls (i.e. Silence Alarms, Reset, Sound Alarms & Silence Buzzer)
- Maximum of 8 repeater panels can be connected to a single control panel

Power	
Power	24vDC (Range 21-31vDC)
Consumption	
Quiescent (Back Light Off)	24vDC @ 16mA
Maximum (Back Light and Controls Enabled)	24vDC @ 50mA
Input	
Communication	RS-485
Max. Length Between Panels	500 Meters
Output	
Communication	RS-485
Max. Length Between Panels	500 Meters
Technical spec	
Max. Number per Panel	8
Environment	
Working Temperature	5° C to 50° C
Weight	0.65 Kg
Dimensions	250 x 140 x 85 mm



BPS-1 24V 1 Amp Boxed Power Supply  
BPS-2 24V 2 Amp Boxed Power Supply  
BPS-5 24V 5 Amp Boxed Power Supply  
Nb Boxed power supplies require 2 x 12V batteries (not supplied)



### MAGDUOSHD

FlexiPoint Detector for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Built-in End of Line function
- Self-calibration every 6 hours
- Continuous dust contamination monitoring
- Device wiring base included



### MAGDUOSHDS

FlexiPoint Detector with Sounder for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Complete with 3 sounder modes
- Built-in End of Line function
- Self-calibration every 6 hours
- Device wiring base included
- Continuous dust contamination monitoring



### MAGDUOSHDSS

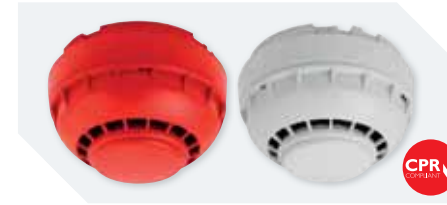
FlexiPoint Detector with Sounder & Strobe for Fire Detection

- 7 modes of fire detection including combined smoke/heat
- Complete with 3 sounder modes and LED strobe
- Built-in End of Line function
- Self-calibration every 6 hours
- Device wiring base included
- Continuous dust contamination monitoring

#### 7 Modes Of Detection

- |  |   |
|--|---|
| Smoke 1 - Standard optical with high thermal enhancement   | Heat 1 - Rate of Rise 58°C, general use in normal, stable environments (Class A1) |
| Smoke 2 - Standard optical with normal thermal enhancement | Heat 2 - Low fixed 58°C, Domestic kitchens etc (Class A1)                         |
| Smoke 3 - Low sensitivity optical with transient rejection | Heat 3 - Hi Fixed 90°C, Commercial kitchens, boiler rooms                         |

Combined - Smoke 2 / Heat 2



### MAGDUOSR Red MAGDUOSW White

Ceiling Sounder for MAGDUO

- Ceiling mount sounder
- Volume level adjustment
- Built-in End of Line function
- Device wiring base included



### MAGDUOSRSQ Red MAGDUOSWSQ White

Wall Sounder for MAGDUO

- Wall mount white sounder
- Volume level adjustment
- Built-in End of Line function
- Device base included



### MAGDUOSSLP

Sounder Strobe for MAGDUO - Low Profile

- Complete with 3 sounder modes and LED strobe
- Volume level adjustment
- Built-in End of Line function
- Low profile design
- Device wiring base included



### MAGDUOSS

Sounder Strobe for MAGDUO - Domed

- Complete with 3 sounder modes and LED strobe
- Volume level adjustment
- Built-in End of Line function
- Domed profile design
- Device wiring base included



### MAGDUOSIP55

Strobe for MAGDUO

- IP55 Ingress protection
- LED strobe
- Built-in End of Line function
- Device base included



### MAGDUOSRIP55

Sounder for MAGDUO

- IP55 Ingress protection
- Volume level adjustment
- Built-in End of Line function
- Device base included



**MAGDUOCP** **MAGDUOCP65** IP Version  
Call Point for MAGDUO

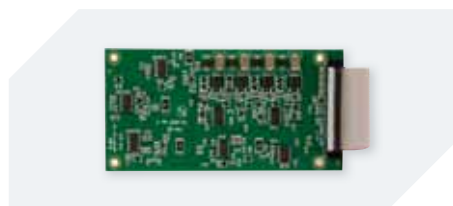
- Resettable manual call point
- Built-in End of Line function
- Device base included

**MAGDUOCPK**  
Spare Call Point Key for MAGDUO



**MAGDUOBBB**  
Battery Expansion Box for MAGDUO

- Includes; conduit bushes, coupling and battery leads
- Batteries not included



**MAGDUOZC4**  
MAGDUO4 Zone Expansion Card

- Expands a 4 zone MAGDUO4 to an 8 zone panel

**MAGDUOCC4**  
MAGDUO4 Zone Conventional Card

- Expands a 4 zone MAGDUO4 to include 4 zones for conventional detectors and call points



**MAGDUO10R**  
Module for MAGDUO

- Configure as an input for reporting from other systems or devices
- Configure as an output to control external systems
- Built-in End of Line function



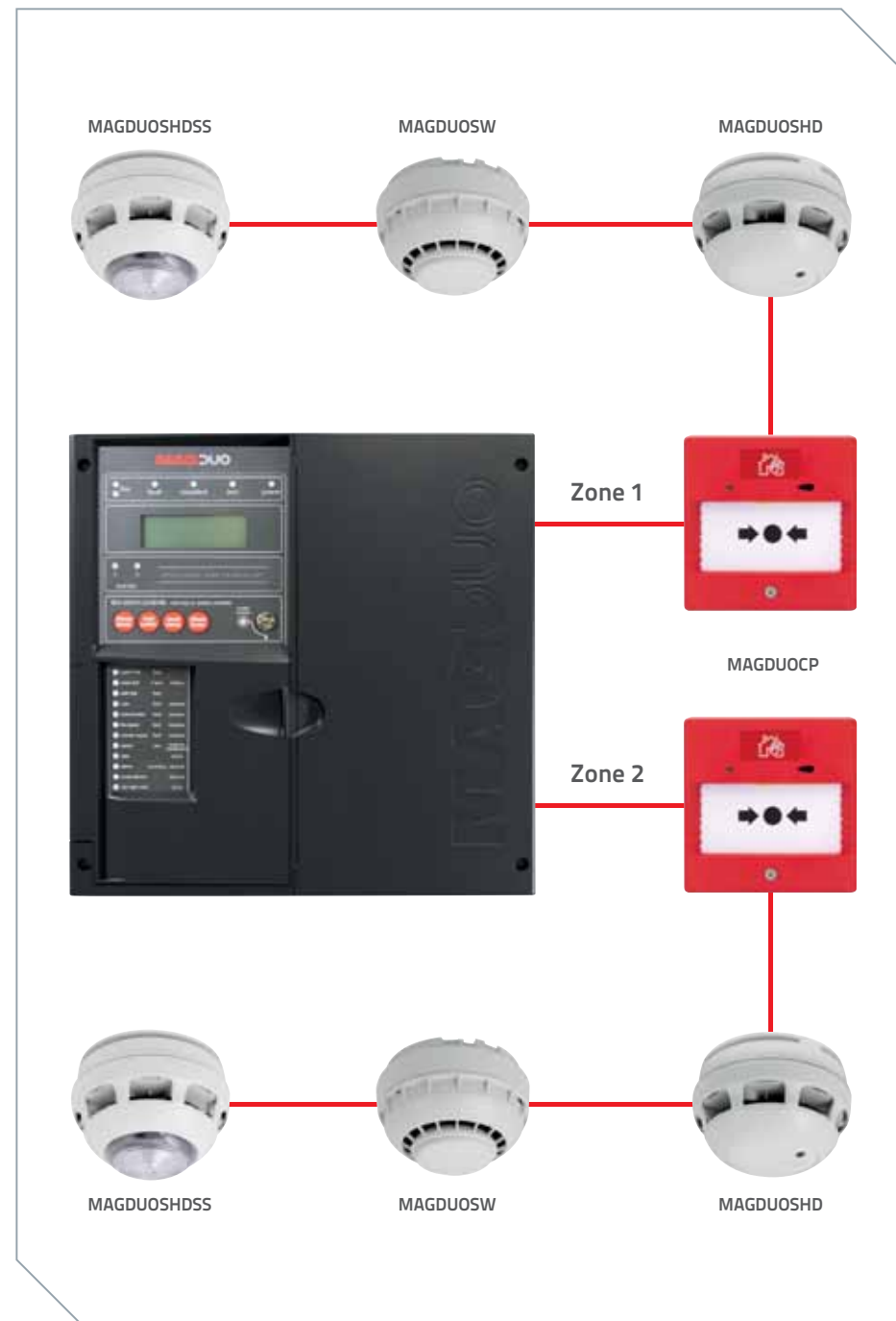
**MAGDUOSHDB**  
Deep Base for MAGDUO Devices

- For use with; FlexiPoint devices, internal ceiling sounders & strobes



**MAGDUOSHRT**  
MAGDUO Head Removal Tool

- Required to remove the chamber from the MAGDUO FlexiPoint detectors, sounders and strobes
- The head removal tool may be attached to an extendable pole





MAGPRO16 White MAGPRO16G Grey  
Addressable 16 Zone Fire Panel



- 16 Zones
- Maximum 250 devices per loop
- Memory Log: 10,000 events
- Networkable up to 32 Panels
- Class change function
- 4 x 40 character LCD display
- Free programming software (On completion of training - UK)
- Micro USB port for PC connection
- Loop & battery calculator software included
- Certified to EN54-2/4

16 zone addressable fire alarm panel supplied with 1 loop.  
Expandable to 2 loops using MAGPRO16-L250.  
A maximum of 250 devices can be connected to each loop.

<b>Inputs</b>	
Loops	1 expandable to 2
Devices Per Loop	250
Protocol	MAGPRO
<b>Power</b>	
Mains Fail Consumption	125mA DC - 1 LOOP 213mA DC - 2 LOOP
Mains Supply	230V AC +10%/-15%
Max Loop Current	500mA DC
Backup	1x12V 18Ah
<b>Outputs</b>	
2 Sounders	24v DC @ 500mA
4 Programmable Relays	24v DC @ 15A
3 Monitored Outputs	24v DC @ 100mA
3 Monitored Inputs	Volt free contacts
<b>Environment</b>	
Working Temperature	-5°C TO +40°C
Storage	-10°C TO 60°C
Humidity	0 - 95%
Weight	4.2KG (Without Battery)
Dimensions	320 x 220 x 80mm



MAGPRO16-L250  
Single Loop Expander for 250 Devices



MAGPRO-PROG Programming Tool  
For more info see page 163



MAGPRO96 White MAGPRO96G Grey  
Addressable 96 Zone Fire Panel



- 96 Zones
- Maximum 250 devices per loop
- Memory Log: 10,000 events
- Networkable up to 32 Panels
- 320 x 240 pixel touch screen display
- Free programming software (On completion of training - UK)
- Micro USB port for PC connection
- Loop & battery calculator software included
- Certified to EN54-2/4

96 zone addressable fire alarm panel supplied with 1 loop.  
Expandable to 4 loops using additional MAGPRO96-L250's.  
A maximum of 250 devices can be connected to each loop.

<b>Inputs</b>	
Loops	1 expandable to 4
Devices Per Loop	250
Protocol	MAGPRO
<b>Power</b>	
Mains Fail Consumption	285mA DC - 1 LOOP 360mA DC - 2 LOOP 435mA DC - 3 LOOP 510mA DC - 4 LOOP
Mains Supply	230V AC +10%/-15%
Max Loop Current	500mA DC
Backup	1x12V 18Ah
<b>Outputs</b>	
1 Sounder	24v DC @ 300mA
4 Programmable Relays	24v DC @ 15A
2 Monitored Outputs	24v DC @ 300mA
1 Auxiliary Output	24v DC @ 300mA
1 Fault Output	24v DC @ 300mA
<b>Environment</b>	
Working Temperature	-5°C TO +40°C
Storage	-10°C TO 60°C
Humidity	0 - 95%
Weight	6KG (Without Battery)
Dimensions	456 x 350 x 125mm



MAGPRO96-L250  
Single Loop Expander  
for 250 Devices



MAGPRO96GGBB  
Battery Expansion Box  
for MAGPRO96G

- Certified according to EN 54-4
- Supports 2x 12V/18Ah



MAGPRO-PROG Programming Tool  
For more info see page 163





\*Recommend a Boxed Power Supply with battery backup

## MAGPRO-REP

### Addressable Repeater Panel



- Wall-mount design
- Only compatible with MAGPRO16 Ver2.8 and higher
- Compatible with MAGPRO96
- Requires 24VDC External Power Supply
- Max consumption of 0.11A (110mA)
- Each panel in network will require a MAGPRO-NIC
- Maximum of 32 panels in the network
- 1000m distance from MAGPRO-REP to MAGPRO Panel
- Dimensions 200 x 330 x 48mm
- Ring type network
- 10,000 event log within the repeater

<b>Power</b>	
From a MAGPRO Panel	AUX / GND
External*	24VDC +/-4 VDC
Consumption	110mA
<b>Input</b>	
Communication	RS485
Max Length Between Panels	1000m
<b>Output</b>	
Communication	RS485
Max Length Between Panels	1000m
<b>Technical spec</b>	
Memory LOG	10,000 events
Network type	Ring
MAGPRO16 Firmware Compatibility	Ver 2.8 or higher
MAGPRO96 Firmware Compatibility	Ver 4.2 or higher
Max number of panels	32
Connection to MAGRO Panel	Via MAGPRO-NIC
<b>Environment</b>	
Working Temperature	-10°C to +50°C
Humidity	0.95
Weight	770g
Dimension	200 x 330 x 48mm

## MAGPRO-NIC NETWORK INTERFACE CARD

- Networks between MAGPRO16/96 & REP Panels
- MAGPRO16 Firmware REV 2.8 or higher Required
- MAGPRO96 Firmware REV 4.2 or higher Required
- RS-485 Communication protocol
- On-board LED indication
- Power supply from the panel
- Programming from the panel
- 1000m transmission distance between modules



## MAGPRO-SD1

### Addressable Smoke Detector

- Sensitivity level selectable from the control panel High/Normal/Middle/Low
- Day/Night mode
- Low profile design
- LED indication with 360° visibility
- Certified to EN54-7
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBS



## MAGPRO-HD1

### Addressable Heat Detector

- Can work as a fixed temperature or rate of rise detector
- Class A1R, A2S, BS selectable from the control panel
- Day/Night mode
- Low profile design
- LED indication with 360° visibility
- Certified to EN54-5
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBS



## MAGPRO-HSD1

### Addressable Combined Smoke & Heat Detector

- Sensitivity selectable from the control panel -High/Normal/Middle/Low
- Class A1R temperature sensor (according to EN54-5)
- Day/Night mode
- Low profile design
- LED indication with 360° visibility
- Certified to EN54-5/7
- Base ordered separately see MAGPRO-DB, MAGPRO-DBS and MAGPRO-DBSS



**MAGPRO-DB**  
Detector Base



**MAGPRO-DBS**  
Sounder Base



**MAGPRO-DBSS**  
Sounder Strobe Base



**MAGPRO-DBSC**  
Detector Base Cover Blank Plate



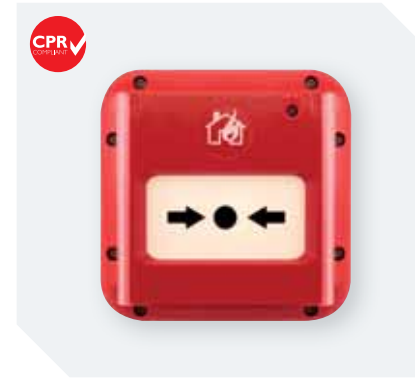
**MAGPRO-WS**  
ADDRESSABLE SOUNDER

- Piezo sounder
- Adjustable sound level - 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Certified to EN54-3
- Base MAGPRO-DB ordered separately



**MAGPRO-WSS**  
SOUNDER STROBE

- Piezo sounder
- Adjustable sound level - 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Certified to EN54-3
- Base MAGPRO-DB ordered separately



**MAGPRO-CPIP67**  
IP67 RATED MANUAL CALL POINT

- Resettable call point
- Certified to EN54-11-A
- Built in isolator
- IP67 Rated



**MAGPRO-CP**  
MANUAL CALL POINT

- Resettable call point
- Certified to EN54-11-A
- Built in isolator
- IP40 Rated
- Optional protective plastic cover MAGPRO-CPC



**MAGPRO-WSS23**  
SOUNDER STROBE

- Certified to EN54-23
- Piezo sounder
- Adjustable sound level - 92dB/100 dB
- 32 sound types selectable from the panel
- Loop synchronization & powered
- Base MAGPRO-DB ordered separately



**MAGPRO-WSBIP65**  
Addressable Fire Alarm Sounder IP65 Base

- Waterproof deep base for MAGPRO addressable sounders
- Only for use with models; MAGPRO-WS, WSS and WSS23
- Robust IP65 Waterproof base suitable for wall mounting in aggressive outdoor environments
- Includes 2x IP65 cable glands, O-ring & gasket for secure installation



**MAGPRO-CPC**  
Plastic Cover for MAGPRO-CP (Pack of 5)



**MAGPRO-PROG**  
PROGRAMMING TOOL

For reading/writing addresses to Callpoints, detectors, sounders and modules.

- Built in MAGPRO-DB standard base
- Mains or battery powered (4 x 1.5V not included)
- Programming cable included



### MAGPRO-IM

#### LOOP ISOLATOR MODULE

- Protection against short circuit
- Auto reset after short circuit
- 4 x cable entry points
- A maximum of 30 devices between two isolators
- Certified to EN54-17



### MAGPRO-MINI

#### 1 INPUT MODULE

- Single volt free contact
- Compact size - 58mm x 25mm x 12mm
- Example applications - Integration of third party control devices
- Compliant to EN54-18



### ZRL2

#### LED INDICATOR PLATE

- Flash rate - permanent
- Current - 28 mA Max
- Operating Voltage Range - 5-28V DC

### BAT18

#### 12V - 17.0AH SLA BATTERY

- 12V 17ah SLA back up battery



### DOOR HOLDERS

DR916-24 24V DC Door Holder

DR916-240 240V AC Door Holder

DR916-FMB Floor Mounting Bracket

DR916-KP Spare Keeper Plate





### MAGPRO-R MAINS RELAY OUTPUT MODULE WITH ISOLATOR

- Suitable for control of 240VAC voltage circuits up to 5A
- Loop powered
- Built in isolator
- Compliant to EN54-18
- Example application - AC 240V door magnet override



### MAGPRO-0i40 4 OUTPUT MODULE WITH ISOLATOR

- 4 Relay outputs
- Loop powered
- Built in isolator
- Certified to EN5-18
- Example applications - Shutdown of ventilation equipment and door override



### MAGPRO-4i00 4 INPUT MODULE WITH ISOLATOR

- 4 Monitored Inputs
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example applications - Input from external equipment, extinguishing/sprinkler panel



### MAGPRO-2i20 2 INPUT 2 OUTPUT MODULE WITH ISOLATOR

- 2 Monitored Inputs
- 2 Outputs
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example application - Link to monitoring station signalling devices



### MAGPRO-10Si CONVENTIONAL SOUNDER MODULE WITH ISOLATOR

- Integrate conventional sounders into an addressable system
- Loop powered
- Built in isolator
- Requires 24V PSU
- Compliant to EN54-18



### MAGPRO-CZM CONVENTIONAL ZONE MODULE WITH ISOLATOR

- Integrate conventional detectors into an addressable system
- Max number of detectors in one zone - 32
- Loop powered
- Built in isolator
- Certified to EN54-18
- Example applications - Integrate conventional equipment i.e. beam detectors

- MAG2P 2 zone fire panel
- 6 x PSD-2 Optical smoke detectors complete with bases
- 2 x SCP-2R Resettable call points
- 2 x BA-2R Banshee sounders
- 1 x BAT7 12v 7.0ah SLA battery



### FLK2P 2 Zone Conventional Fire Alarm Kit



- MAG4P 4 zone fire panel
- 5 x PSD-2 Optical smoke detectors complete with bases
- 1 x FHD-2 Fixed temperature heat detector complete with base
- 2 x SCP-2R Resettable call points
- 2 x BA-2R Banshee sounders
- 1 x BAT7 12v 7.0ah SLA battery



### FLK4PH 4 Zone Conventional Fire Alarm Kit





## MAG2P 2 Zone Fire Panel



- 2 programmable zones
- Active end of line monitoring and head removal
- 30 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire change over relay
- Volt free fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- CE certified to EN54 P2/4
- Requires only 1x12v battery
- MAG2P - ABS casing

<b>Inputs</b>	
Max Detectors Per Zone	30
Thresholds for Zone Conditions	
	0 - 2 mA (Fault condition)
	2 - 6 mA (Normal condition)
	6 - 110 mA (Fire condition)
	110 mA - Short (Fault condition)
<b>Power</b>	
Mains Fail Consumption	50mA
Mains Supply	230 VAC ± 10%
Standby Supply	1 x 7ah 12V S.L.A. Battery
Power Availability	0.7 amps
<b>Outputs</b>	
Sounder 1	24V (max 300mA fused)
Sounder 2	24V (max 300mA fused)
Fault/Fire Relay	Volt free 500mA @ 24V (max load)
Auxiliary Output	24VDC (300mA fused)
<b>Environment</b>	
Working Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 - 95%
Dimensions MAG2P	340 x 290 x 100mm
Dimensions MAG2	200 x 290 x 80mm
Weight	MAG2P - 2.1Kg MAG2 - 2.7Kg



**MAG2**  
2 Zone Fire Panel - Metal Casing

**MAGBAR2/4**

Spare Barrel & key for use with MAG 2 & 4



## MAG4P 4 Zone Fire Panel



- 4 programmable zones
- Active end of line monitoring and head removal
- 30 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire change over relay
- Volt free fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- CE certified to EN54 P2/4
- Requires only 1x12v battery
- MAG4P - ABS casing

<b>Inputs</b>	
Max Detectors per Zone	30
Thresholds for Zone Conditions	
	0 - 2 mA (Fault condition)
	2 - 6 mA (Normal condition)
	6 - 110 mA (Fire condition)
	110 mA - Short (Fault condition)
<b>Power</b>	
Mains Fail Consumption	50mA
Mains Supply	230 VAC ± 10%
Standby Supply	1 x 7ah 12V S.L.A. Battery
Power Availability	0.7 amps
<b>Outputs</b>	
Sounder 1	24V (max 300mA fused)
Sounder 2	24V (max 300mA fused)
Fault/Fire Relay	Volt free 500mA @ 24V (max load)
Auxiliary Output	24VDC (300mA fused)
<b>Environment</b>	
Working Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 - 95%
Dimensions MAG4P	340 x 290 x 100mm
Dimensions MAG4	320 x 220 x 80mm
Weight	MAG4P - 2.5Kg MAG4 - 3.5Kg



**MAG4**  
4 Zone Fire Panel - Metal Casing

**MAGBAR2/4**

Spare Barrel & key for use with MAG 2 & 4





MAG816  
8 Zone Fire Panel Expandable to 16 Zones

- Up to 16 programmable zones
- Up to 16 sounder circuits
- Active end of line monitoring and head removal
- Up to 32 fire detectors per zone
- Unlimited number of call points per zone
- Integral sound alarm button
- Repeater facility and 'Class change' facility
- Enable/disable security key
- One man walk test facility
- Volt free fire/fault change over relay
- Individual sounder circuit fault ID
- Individual zone/sounder isolate
- Alarm delay options
- CE certified to EN54 P2/4
- Requires 1 x 12V battery
- ABS casing

<div>CPR</div> <div>EN54</div> <div>CE</div> <div>Made in EU</div> <div>RoHS</div>	
Inputs	
Max. Detectors per Zone	32
Thresholds for Zone Conditions	0 - 2 mA (Fault condition) 2 - 10 mA (Normal condition) 10 - 110 mA (Fire condition) 110mA - + Short (Fault condition)
Power	
Mains Fail Consumption	130mA (1 zone expander) 260mA (4 zone expanders)
Mains Supply	230 VAC ± 10%
Standby Supply	1 x 18ah 12V S.L.A. Batteries
Power Availability	0.7 amps
Outputs	
On Board Sounder Circuits (4)	300mA @ 24V fuse resettable (PTC)
Sounder Expander Cards (4)	150mA @ 24V fuse resettable (PTC)
Fault/Fire Relay	Volt free 500mA @ 24V (max load)
Auxiliary Output	24VDC (300mA fused)
Environment	
Working Temperature	0 to 40°C
Storage Temperature	-20 to 60°C
Humidity	0 to 93%
Dimensions (mm)	456 x 350 x 125mm
Weight	4.2 KG

FIRE ZONE / SOUNDER OUTPUT MATRIX

Number of zone cards fitted	2	3	4	2	3	1	2	1
Number of sounder cards fitted	0	0	0	1	1	2	2	3
Number of zones	8	12	16	8	12	4	8	4
Number of sounder outputs	4	4	4	8	8	12	12	16

NB The MAG816 features 4 sounder circuits. Space is provided for up to 4 extra expansion cards of any combination. Sounder cards carry 4 sounder circuits, Zone cards carry 4 fire zones. The MAG816 is supplied as standard with 8 fire zones and 4 sounder circuits.



CSD2  
Combined Optical Smoke & Fixed Heat Detector

Type	Conventional
Approval	EN54-7, EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke/ Heat



FHD2  
Fixed Temperature Heat Detector

Type	Conventional
Approval	EN54-5
Class	A2S
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

These MAGfire detectors have been developed to provide a perfect compliment to the MAGfire MAG panels. All detectors are supplied with a diode base. Fully compliant with CPR and approved to EN54 standards.



PSD2  
Optical Smoke Detector

Type	Conventional
Approval	EN54-7
Class	N/A
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke



RHD2  
Rate of Rise Heat Detector

Type	Conventional
Approval	EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 24v	< 60µA
Alarm Current @ 24v	49mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source





**CSD212**  
Combined Optical Smoke & Fixed Heat Detector

Type	Conventional
Approval	EN54-7, EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke/ Heat



**FHD212**  
Fixed Temperature Heat Detector

Type	Conventional
Approval	EN54-5
Class	A2S
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

The new range of MAGfire detectors have been developed to provide a perfect compliment to 12V hardwire intruder alarm systems. All detectors are supplied with a relay base. Fully compliant with CPR and approved to EN54 standards.



**PSD212**  
Optical Smoke Detector

Type	Conventional
Approval	EN54-7
Class	N/A
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Simulated Smoke



**RHD212**  
Rate of Rise Heat Detector

Type	Conventional
Approval	EN54-5
Class	A1R
Operating Voltage	9 - 30VDC
Standby Current @ 12v	< 50µA
Alarm Current @ 12v	29mA
Wire Gauge	0.4mm - 2.0mm TWIN
Operating Temperature	-10°C to 60°C
Test Facility	Heat Source

- Up to 50m range
- Expandable to 120m with the BD1LRK
- Integral laser alignment
- Auto Align automatic beam alignment
- 24v DC 35mA max current draw
- EN 54-12 approved



**BD1**  
50m Beam Detector expandable up to 120m

- Kit for extending BD1 range up to 120m



**BD1LRK**  
BD1 Reflective Long Range Kit



**SCP2R**  
Resettable Call Point

- Surface or flush mounting
- Complete with surface back box
- Spare cover available - SCP2R-CVR



**SCP2R-CVR**  
Plastic Cover for SCP2R (Pack of 5)



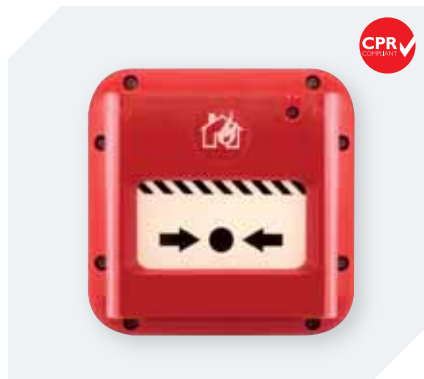
**ZRL2**  
LED Indicator Plate

- Flash rate - permanent
- Current - 28 mA Max
- Operating Voltage Range - 5-28V DC



**BA-2W**  
White Banshee Sounder

- Sound Output @ 1m 89 - 110 dBA
- Current - 3-39 mA
- IP Rating - IP45



**SCP2RIP67**  
IP67 Rated Manual Call Point

- Resettable call point
- Certified to EN54-11-A
- IP67 Rated



**SCP2RK**  
Reset Key

Spare Keys for MAGPRO-CP, MAGPRO-CPIP67, SCP2R & SCP2RIP67 (Pack of 5)



**BA-2R**  
Red Banshee Sounder

- Sound Output @ 1m 89 - 110 dBA
- Current - 3-39 mA
- IP Rating - IP45



**CB-1R**  
Banshee Sounder and Strobe

- Sound Output - 89-110 dBA
- Flash rate - 60/minute
- Current - 40 mA plus sounder
- IP Rating - IP45



**CB-1RIP66**  
Waterproof Sounder and Strobe

- Sound Output - 89-110 dBA
- Flash rate - 60/minute
- Current - 40 mA plus sounder
- IP Rating - IP66



**FS1L**  
LED strobe

- Flash rate - 60/minute
- 12V & 24V (80mA & 30mA)
- IP Rating - IP65



**MAGSWS**  
White Surface Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21



**MAGSRS**  
Red Surface Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21



**MAGBSW**  
White Bedhead Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21



**MAGBSR**  
Red Bedhead Sounder

- Sound Output @ 1m 86 - 96 dBA
- Current - 6mA @ 24VDC
- IP Rating - IP21



**MAGSSTRWS**  
White Surface Sounder with Strobe

- Sound Output @ 1m 86 - 96 dBA
- Flash Rate - 40/Minute
- Current - 14mA @ 24VDC
- IP Rating - IP21



**MAGSSTRRS**  
Red Surface Sounder with Strobe

- Sound Output @ 1m 86 - 96 dBA
- Flash Rate - 40/Minute
- Current - 14mA @ 24VDC
- IP Rating - IP21



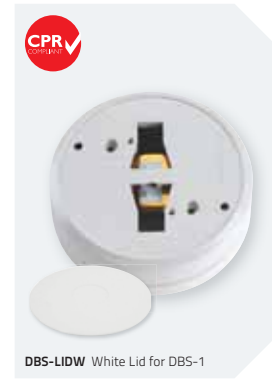
**IFB**  
Internal Fire Bell

- Sound Output - 95 dBA
- Current - 11 mA
- 6" diameter
- IP Rating - IP21C



**SD-DB**  
Detector Deep Base

- Allows for mounting in surface cable entry application or on a rough, uneven surface
- Can be used as an adaptor plate for addressable sounder base
- Compatible with: MAGPRO-DB, MAGPRO-DBS, MAGPRO-DBSS, PSD2, CSD2, PSD212, CSD212



**DBS-1**  
Detector Base Sounder

- Sound Output @ 1m - 93 dBA
- Current - 18 mA



**24V BOXED POWER SUPPLIES**

- BPS-1** 24V 1 Amp Boxed Power Supply
- BPS-2** 24V 2 Amp Boxed Power Supply
- BPS-5** 24V 5 Amp Boxed Power Supply

Nb Boxed power supplies require 2 x 12V batteries (not supplied)



**EN54-4 POWER SUPPLIES**

- BPS2EN** EN54-4 2A PSU
- BPS5EN** EN54-4 5A PSU



**BA-DB**  
Base for sounder BA-2R, BA-2W and CB-1R to make IP Rated



**BAT32**  
12V - 3.2AH SLA BATTERY

- 12V 3.2ah SLA back up battery



**BAT7**  
12V - 7.0AH SLA BATTERY

- Back up battery for EVBPSBB, MAG2P, MAG2, MAG4P and MAG4



**BAT18**  
12V - 17.0AH SLA BATTERY

- 12V 17ah SLA back up battery



**MAGLB**  
FIRE SAFETY LOG BOOK

- Ensure system records are maintained in accordance with BS5839-1
- Contains test procedures, frequencies of service & maintenance requirements
- Clear data tables for evidence of system services, tests and inspections
- A4



**DOOR HOLDERS**

- DR916-24** 24V DC Door Holder  
**DR916-240** 240V AC Door Holder

- DR916-KP** Spare Keeper Plate  
■ For use with DR916-24 and DR916-240



**MAGEOL**  
ZONE MODULE

- End of line zone module (Pack of 5)
- For conventional panels



**MAGR**  
8 ZONE RELAY MODULE MAG816

- Expander module providing 8 relay switches for zone activation
- Separate zone (max. 8) activation in fire condition
- N.O & N.C options



**DR916-FMB**  
FLOOR MOUNTING BRACKET

- For use with DR916-24 and DR916-240



**MAGEOL-S**  
SOUNDER MODULE

- End of line sounder module (Pack of 5)
- For conventional panels



**MAGAUXISORP**  
AUXILIARY ISOLATION SWITCH (RED)

- Suitable for mains switching up to 8 amp
- Secure key switch enables safety for maintenance and offers protection against tamper
- External trigger option
- Programmable internal buzzer for activation
- Clear operation LED indication
- Surface or recess mount



**MAGISORP**  
FIRE ISOLATION SWITCH (RED)

- Complies with BS5839 Part1
- Isolates the mains voltage supply to the fire system
- Enables safety for maintenance and offers protection against tamper
- Both the live and neutral supply is switched



**MAGISOPFUSE**  
FIRE ISOLATION SWITCH SPARE FUSES

- Spare fuses for MAGISORP - Fire Isolator Switch



**MAGAUXISOWP**  
AUXILIARY ISOLATION SWITCH (WHITE)

- Suitable for mains switching up to 8 amp
- Secure key switch enables safety for maintenance and offers protection against tamper
- External trigger option
- Programmable internal buzzer for activation
- Clear operation LED indication
- Surface or recess mount



**MAGISOWP**  
FIRE ISOLATION SWITCH (WHITE)

- Complies with BS5839 Part1
- Isolates the mains voltage supply to the fire system
- Enables safety for maintenance and offers protection against tamper
- Both the live and neutral supply is switched



**MAGISORPK**  
FIRE/AUXILIARY ISOLATION SWITCH SPARE KEY

- Spare key for MAGISORP & MAGAUXISORP

A modern office interior with a grey carpet, white walls, and a white grid ceiling. Several rectangular emergency light fixtures are recessed into the ceiling. In the background, there is a glass door with a green exit sign above it. To the left, there are desks with computers and office chairs. To the right, there are more desks and office chairs. The overall atmosphere is clean and professional.

*duceri*®

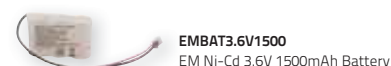
## EMERGENCY LIGHTING

The new emergency lighting collection provides contractors and installers with a comprehensive, contemporary product range that has been independently tested to comply with the latest industry standards and regulations. The range now also includes the new Self-Test range.





- Self Test Emergency Light
- 5500K Colour Temperature
- Viewing Distance - 25m
- SMD 2835 LED lamp
- Steel housing - White Finish
- Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd battery
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg



### EMSTLED3WMEXBOX

EM Exit Self-Test 3W IP20 Main



EMSTLED3WMEXBOXU  
EM Exit Up Self-Test 3W  
IP20 Main



EMSTLED3WMEXBOXD  
EM Exit Down Self-Test  
3W IP20 Main



EMSTLED3WMEXBOXL  
EM Exit Left Self-Test  
3W IP20 Main



EMSTLED3WMEXBOXR  
EM Exit Right Self-Test  
3W IP20 Main



- Self Test Emergency Light
- 5500K Colour Temperature
- Maintained & Non-Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Mains Light Output - 121 Lumens
- Emergency light Output - 119 Lumens
- Dimensions - 345 x 110 x 60mm
- Weight - 0.6Kg



EMBAT3.6V1500SER EM Ni-Cd 3.6V 1500mAh Battery

### EMSTLED3WMBULK

EM Bulk Self-Test 3W IP65 Main

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3.1	7.4	6.5	5.6	2.4
2.5m	3.3	8.3	7.3	6.3	2.6
3.0m	3.4	9.0	8.0	6.9	2.7

Illuminance values based on a maintenance factor of 0.85

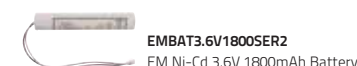
Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



### EMST3WMSDL

EM Downlight Self-Test 3W IP44 Non-Main

- Self Test Emergency Light
- Interchangeable Open & Corridor Lens
- 5500K Colour Temperature
- High Power 3W LED
- Maintained & Non-Maintained Operation
- Polycarbonate Housing
- Ceiling or Wall Mounted - flush kit available
- Charge and Discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- IP44 Ingress Protection Rating
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output - 147 Lumens (Open lens)
- Emergency Light Output - 138 Lumens (Corridor lens)
- Weight - 0.4Kg

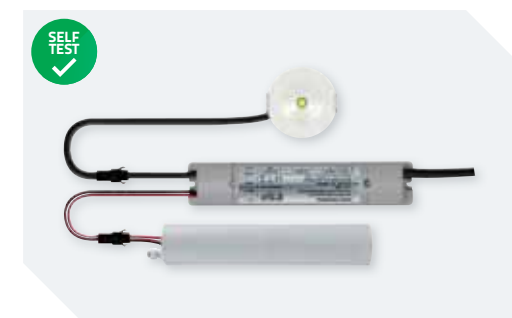


Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	Open 2.4, Corridor 0.9	Open 7.9, Corridor 5.8	Open 7.9, Corridor 7.9	Open 7.9, Corridor 10.0	Open 2.4, Corridor 4.6
2.5m	Open 2.5, Corridor 0.5	Open 6.7, Corridor 2.4	Open 7.0, Corridor 7.1	Open 7.4, Corridor 11.9	Open 2.6, Corridor 5.4
3.0m	Open 1.0, Corridor 0.5	Open 6.8, Corridor 2.4	Open 6.9, Corridor 8.1	Open 6.9, Corridor 13.7	Open 2.8, Corridor 6.1

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- Self Test Emergency Light
- 5500K Colour Temperature
- High Power 3W LED
- Aluminium Bezel
- Recessed Mounting
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output - 138 Lumens
- Weight - 0.4Kg



### EMST3WNMDLK

EM Downlight Self-Test 3W IP20 Non-Main

Mounting Height	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.9	7.2	7.1	7.2	2.8
2.5m	3.1	7.7	7.6	7.7	2.9
3.0m	3.1	8.1	8.0	8.0	3.0

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



### EMST9WNMSPOT

EM Twin Self-Test 9W IP65 Non-Main

- Self Test Emergency Light
- 5500k Colour Temperature
- 2 x 15 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 9.6V 2200mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- BS EN 62034 Standards
- Emergency Light Output - 535 Lumens
- Dimensions - 305 x 306 x 70mm
- Weight - 1.85Kg

- 5500K colour temperature
- 2 x 3W 6 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 3500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output - 380 Lumens
- IP65 Ingress Protection
- Dimensions - 301mm x 280mm x 90mm
- Weight - 1.65kg

**EMBAT3.6V3000**  
EM Ni-Cd 3.6V  
3000mAh Battery



Black **EMNMIP65BSPOT** White **EMNMIP65SPOT**  
EM Twin 6W IP65 Non-Main

- 5500K Colour Temperature
- 2 x 15 SMD 2835 LED Lamp
- Polycarbonate housing & heads
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 9.6V 2200mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output - 535 Lumens
- Dimensions - 305 x 280 x 85mm
- Weight - 1.85Kg

**EMBAT9.6V2200**  
EM Ni-Cd 9.6V  
2200mAh Battery



**EMD9WNMSPOT2**  
EM Twin 9W IP65 Non-Main White



- 5500K colour temperature
- 2 x 2W 3 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output - 272 Lumens
- IP20 Ingress Protection
- Dimensions - 273mm x 260mm x 60mm
- Weight - 1.35kg

#### EMNMIP20SPOT

EM Twin 4W IP20 Non-Main White



- 5500K colour temperature
- 2 x 2W 3 SMD 2835 LED Lamps
- Polycarbonate Housing & Heads
- Wall mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output - 272 Lumens
- IP20 Ingress Protection
- Dimensions - 273mm x 260mm x 60mm
- Weight - 1.35kg

#### EMNMIP20BSPOT

EM Twin 4W IP20 Non-Main Black

- 5500K colour temperature
- 2 x 6 SMD 2835 LED Lamps
- Polycarbonate housing & heads
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 3000mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output - 309 Lumens
- Dimensions - 305 x 280 x 85mm
- Weight - 1.85Kg

**EMBAT3.6V3000**  
EM Ni-Cd 3.6V  
3000mAh Battery



#### EMNMIP40SPOT

EM Twin 6W IP40 Non-Main White



- 5500K colour temperature
- 2 x 6 SMD 2835 LED Lamps
- Polycarbonate housing & heads
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 3000mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Emergency light output - 309 Lumens
- Dimensions - 305 x 280 x 85mm
- Weight - 1.85Kg

**EMBAT3.6V3000**  
EM Ni-Cd 3.6V  
3000mAh Battery



#### EMNMIP40BSPOT

EM Twin 6W IP40 Non-Main Black



- Hinged Lid to Assist Installation
- 5500K Colour Temperature
- Maintained & Non-Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Legend Included
- 3.6V 900mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Mains Light Output - 151 Lumens
- Emergency Light Output -107 Lumens
- Dimensions - 225 x 105 x 50mm
- Weight - 0.5Kg



EMBAT3.6V900SER EM Ni-Cd 3.6V 900mAh Battery

### EMLED3WMHBULK2

EM Bulk Hinged 3W IP65 Main

Mounting Height					
	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.2	6.0	6.0	6.0	2.1
2.5m	2.3	6.3	6.0	5.6	2.4
3.0m	2.2	6.4	6.3	6.2	2.5

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- 5500K Colour Temperature
- SMD 2835 LED Lamp
- Maintained & Non-Maintained Operation
- Polycarbonate housing
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Legend Included
- 3.6V 1200mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Mains light output - 120 Lumens
- Emergency light output - 100 Lumens
- Dimensions - 345 x 110 x 60mm
- Weight - 0.6Kg



EMBAT3.6V1200SER EM Ni-Cd 3.6V 1200mAh Battery

EMBULKLGD EM Bulk Legend

EMBULK2FLUSH EM Bulk Flushing Kit

EMBULK2FLUSH EM Bulk Flushing Kit

Mounting Height					
	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3	7	6	5.5	2
2.5m	3	8	7	6	2.5
3.0m	3.2	8.8	7.8	6.8	2.6

Illuminance values based on a maintenance factor of 0.8

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- 5500K colour temperature
- 30 SMD 2835 LED Lamp
- Maintained & Non-Maintained Operation
- Polycarbonate Housing
- Recessed mounting
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd batteries
- BS EN 60598-2-22 Standards
- Mains light output - 131 Lumens
- Emergency light output -105 Lumens
- IP20 Ingress Protection
- Dimensions; 389 x 126 x 80mm
- Cut out dimensions; 340 x 90mm
- Weight - 0.8Kg



EMBAT3.6V1500 EM Ni-Cd 3.6V 1500mAh Battery

### EMDLEDWMFLUSH

EM Bulk Flush 4W IP20 Main

Mounting Height					
	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	2.4	6.3	6.3	6.3	2.4
2.5m	2.5	6.7	6.3	6.7	2.5
3.0m	2.5	6.9	6.9	6.9	2.4

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- 5500K Colour Temperature
- Maintained & Non Maintained Operation
- SMD 2835 LED Lamp
- Polycarbonate Housing
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1800mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Mains Light Output - 208 Lumen
- Emergency light Output -190 Lumen
- IP65 Ingress Protection
- Dimensions - 350 x 110 x 60mm
- Weight - 0.8Kg



EMBAT3.6V1800SER EM Ni-Cd 3.6V 1800mAh Battery

EMBULKLGD EM Bulk Legend

EMBULK2FLUSH EM Bulk Flushing Kit

Mounting Height					
	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	3.1	8.1	7.3	6.4	2.6
2.5m	3.2	8.6	7.8	7.0	2.7
3.0m	3.3	8.9	8.2	7.5	2.8

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)








- 5500k Colour Temperature
- 84 SMD 2835 LED Lamp
- Maintained & Non-Maintained Operation
- Polycarbonate Housing White finish
- Wall or Ceiling Mounted
- 1207 Lumen mains output
- 285 Lumen emergency output
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- 6V 1800mAh Ni-Cd Battery
- IP65 Rating
- BS EN 60598-2-22
- Dimensions - 330 x 330 x 110mm
- Weight-2.3Kg

**EMBAT6V1800**  
EM Ni-Cd 6V 1800mAh Battery



### EM14WMCBULK

EM Circ Bulk 14W IP65 Main

Mounting Height					
	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	5.7	13.9	13.9	13.9	5.7
2.5m	6.2	15.3	15.3	15.3	6.2
3.0m	6.7	16.3	16.4	16.4	6.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- 5500K Colour Temperature
- 84 SMD 2835 LED Lamp
- Polycarbonate Housing
- White finish
- Wall or Ceiling Mounted
- 1207 Lumen mains output
- Green LED indicator
- IP65 Rating
- BS EN 60598-1
- Dimensions - 330 x 330 x 110mm
- Weight - 2.06Kg

### EM14WMAINSBULK

EM Circ Bulk 14W IP65 Mains



- 5500K Colour Temperature
- 84 SMD 2835 LED Lamp
- Maintained & Non-Maintained Operation
- Microwave 160° Sensor
- Microwave LUX Setting; 0-30 Lux
- Microwave Duration Setting; 6 Seconds to 30 Minutes
- Microwave Sensitivity Setting; 1-10 Meters
- Polycarbonate Housing
- White finish
- Wall or Ceiling Mounted
- 1207 Lumen mains output
- 285 Lumen emergency output
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- 6V 1800mAh Ni-Cd Battery
- IP65 Rating
- BS EN 60598-2-22
- Dimensions - 330 x 330 x 110mm
- Weight-2.4Kg

**EMBAT6V1800**  
EM Ni-Cd 6V 1800mAh Battery

### EM14WMCBULKMW

EM Circ Bulk 14W IP65 Main MW

Mounting Height					
	Axial/ Wall	Axial/ Axial	Transverse/ Axial	Transverse/ Transverse	Transverse/ Wall
2.0m	5.7	13.9	13.9	13.9	5.7
2.5m	6.2	15.3	15.3	15.3	6.2
3.0m	6.7	16.3	16.4	16.4	6.7

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- 5500K Colour Temperature
- 84 SMD 2835 LED Lamp
- Microwave 160° Sensor
- Microwave LUX Setting; 0-30 Lux
- Microwave Duration Setting; 6 Seconds to 30 Minutes
- Microwave Sensitivity Setting; 1-10 Meters
- Polycarbonate Housing
- White finish
- Wall or Ceiling Mounted
- 1207 Lumen mains output
- IP65 Rating
- BS EN 60598-1
- Dimensions - 330 x 330 x 110mm
- Weight-2.16Kg

### EM14WMAINSBULKMW

EM Circ Bulk 14W IP65 Mains MW



- 5500K Colour Temperature
- Viewing distance - 25m
- SMT 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg

**EMDLED3WMEXBOX**  
EM Exit 3W IP20 Main



**EMBAT3.6V1500**  
EM Ni-Cd 3.6V  
1500mAh Battery



**EMDLED3WMEXBOXU**  
EM Exit Up 3W IP20 Main



**EMDLED3WMEXBOXD**  
EM Exit Down 3W IP20  
Main



**EMDLED3WMEXBOXL**  
EM Exit Left 3W IP20  
Main



**EMDLED3WMEXBOXR**  
EM Exit Right 3W IP20  
Main

- 5500K colour temperature
- Viewing distance - 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg



**EMBAT3.6V1500**  
EM Ni-Cd 3.6V  
1500mAh Battery



**EMLED3WMEXBOXBRU**  
EM Exit Up 3W IP20 Main  
Brass



**EMLED3WMEXBOXBRD**  
EM Exit Down 3W IP20 Main  
Brass



**EMLED3WMEXBOXBRL**  
EM Exit Left 3W IP20 Main  
Brass



**EMLED3WMEXBOXBRR**  
EM Exit Right 3W IP20 Main  
Brass

**EMLED3WMEXBOXBR**  
EM Exit Up 3W IP20 Main Brass



- 5500K colour temperature
- Viewing distance - 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg

**EMLED3WMEXBOXCH**  
EM Exit Up 3W IP20 Main Chrome



**EMBAT3.6V1500**  
EM Ni-Cd 3.6V  
1500mAh Battery



**EMLED3WMEXBOXCHU**  
EM Exit Up 3W IP20 Main  
Chrome



**EMLED3WMEXBOXCHD**  
EM Exit Down 3W IP20 Main  
Chrome



**EMLED3WMEXBOXCHL**  
EM Exit Left 3W IP20 Main  
Chrome



**EMLED3WMEXBOXCHR**  
EM Exit Right 3W IP20 Main  
Chrome

- 5500K colour temperature
- Viewing distance - 25m
- SMD 2835 LED Lamp
- Steel housing
- Wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 1500mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions - 390 x 190 x 60mm
- Weight - 1.3Kg



**EMBAT3.6V1500**  
EM Ni-Cd 3.6V  
1500mAh Battery



**EMLED3WMEXBOXBKU**  
EM Exit Up 3W IP20 Main Black



**EMLED3WMEXBOXBKD**  
EM Exit Down 3W IP20 Main  
Black



**EMLED3WMEXBOXBKL**  
EM Exit Left 3W IP20 Main  
Black



**EMLED3WMEXBOXBKR**  
EM Exit Right 3W IP20 Main  
Black

**EMLED3WMEXBOXBK**  
EM Exit Up 3W IP20 Main Black







- 5500K Colour Temperature
- 16 SMD 2835 LED Lamp
- Polycarbonate Frame, Acrylic Legend
- Ceiling Mounted
- 60 Lumen mains output
- 44 Lumen emergency output
- 24m Viewing Distance
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Legend Dimensions - 190x 300mm
- Legend adjustable up to 650mm
- Weight-1.2Kg

### EMD2WMEXHSIGN

EM Exit Sign 3W IP20 Main



**EMD2WMEXHSIGNU**  
EM Exit Up 3W IP20  
Main



**EMD2WMEXHSIGND**  
EM Exit Down 3W  
IP20 Main



**EMD2WMEXHSIGNL**  
EM Exit Left 3W IP20  
Main



**EMD2WMEXHSIGNR**  
EM Exit Right 3W  
IP20 Main

**EMBAT3.6V900** EM Ni-Cd 3.6V 900mAh Battery



- 5500K Colour Temperature
- Viewing distance - 24m
- SMD 3528 Lamp
- Polycarbonate frame with legend
- Ceiling or wall mounted
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Legend Dimensions - 190x 300mm
- Weight - 0.8Kg

### EMD2WMEXSIGN

EM Hanging Exit Sign 3W IP20 Main



**EMD2WMEXSIGNU**  
EM Exit Up 3W IP20  
Main



**EMD2WMEXSIGND**  
EM Exit Down 3W IP20  
Main



**EMD2WMEXSIGNL**  
EM Exit Left 3W IP20  
Main



**EMD2WMEXSIGNR**  
EM Exit Right 3W IP20  
Main

**EMBAT3.6V900**  
EM Ni-Cd 3.6V 900mAh Battery



### EMD3WMSLEXBOXUDLR

EM Exit All Legends 3W IP20  
Main

- 6500K Colour Temperature
- 3W 20 SMD 3014 LED + 5 SMD 2835 LED
- Polycarbonate Frame, PVC legends
- Wall Mounted
- 45 Lumen Mains Output
- 34 Lumen Emergency Output
- 29m Viewing Distance
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- 3.6V 800mAh Ni-Cd Battery
- IP20 Ingress Protection
- BS EN 60598-2-22
- Legend Dimensions - 320 x 185 x 26mm
- Weight-0.6Kg



### EMLED5WMBULKEX

EM Exit Bulk All Legends 5W IP65 Main

- 5500K Colour Temperature
- SMD 2835 LED Lamp
- 28m Viewing Distance
- Polycarbonate Housing
- Ceiling Mounted
- Charge and Discharge Protection
- 3 Hours Emergency Duration
- Double Sided
- Legends Included
- 3.6V 1800mAh Ni-Cd Battery
- BS EN 60598-2-22 Standards
- Dimensions - 345 x 110 x 190 mm
- Weight - 1Kg



### EMD2WMEXSIGNUDLR

EM Exit All Legends 3W IP20  
Main

- 5500K Colour Temperature
- Viewing Distance - 24m
- 3W 16 SMD 2835 LED Lamp
- Polycarbonate Frame, Double Sided PVC Legend
- Ceiling or Wall Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd
- BS EN 60598-2-22
- Dimensions - 305mm x 225mm x 160mm
- Legend Dimensions - 190mm x 300mm
- Weight - 0.8kg



### EMD2WMEXHSIGNUDLR

EM Exit All Legends 3W IP20 Main

- 5500K Colour Temperature
- Viewing Distance - 24m
- 3W 16 SMD 2835 LED Lamp
- Polycarbonate Frame, Double Sided PVC Legend
- Ceiling Mounted
- Charge and Discharge Protection
- Green LED Indicator
- 3 Hours Emergency Duration
- 3.6V 900mAh Ni-Cd
- BS EN 60598-2-22
- Dimensions - 305mm x 225mm x 160mm
- Legend Dimensions - 190mm x 300mm
- Weight - 1.5kg



- 5500K Colour Temperature
- High Power 5W LED
- Aluminium bezel
- Recessed Mounted
- Emergency light output - 214 Lumen output
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- 4.8V 3500mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.9Kg

### EM5WNMCDLK

EM Downlight Corridor 5W IP20 Non-Main



Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	3.6	8.4	7.4	6.3	2.4
2.5m	4.2	9.5	8.0	6.5	2.6
3.0m	4.7	10.7	8.8	6.9	2.7

Illuminance values based on a maintenance factor of 0.85

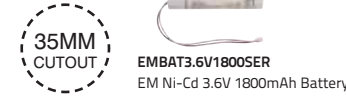
Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour Temperature
- High Power 3W LED
- Aluminium bezel
- Recessed Mounted
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- Emergency light output - 105 Lumen output
- 3.6V 1800mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.4Kg



### EM3WNMCDLK

EM Downlight Corridor 3W IP20 Non-Main



Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	1.5	7.6	8.4	9.1	4.1
2.5m	1.6	4.3	7.5	10.6	4.8
3.0m	1.8	4.2	8.2	12.2	5.3

Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- 5500K Colour Temperature
- High Power 5W LED
- Aluminium bezel
- Recessed Mounted
- Emergency light output - 263 Lumen output
- Charge and Discharge Protection
- Green LED indicator
- 3 Hours Emergency Duration
- 4.8V 3500mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.9Kg

### EMD5WNMDLK

EM Downlight Open 5W IP20 Non-Main



Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	3.2	7.3	7.2	7.2	3.2
2.5m	3.7	8.4	8.4	8.4	3.7
3.0m	4.2	9.4	9.4	9.4	4.1

Illuminance values based on a maintenance factor of 0.85

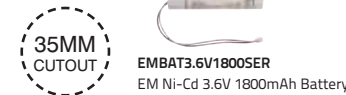
Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)

- 5500K Colour Temperature
- High Power 3W LED
- Aluminium bezel
- Recessed mounting
- Charge and discharge protection
- Green LED Indicator
- 3 Hours Emergency Duration
- Emergency light output - 138 Lumens
- 3.6V 1800mAh Ni-Cd Battery
- IP20 Rating
- BS EN 60598-2-22
- Weight- 0.4Kg



### EMD3WNMDLK

EM Downlight Open 3W IP20 Non-Main



Mounting Height	Axial/Wall	Axial/Axial	Transverse/Axial	Transverse/Transverse	Transverse/Wall
2.0m	2.9	7.2	7.1	7.2	2.8
2.5m	3.1	7.7	7.6	7.7	2.9
3.0m	3.1	8.1	8.0	8.0	3.0

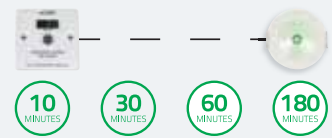
Illuminance values based on a maintenance factor of 0.85

Photometric spacing data 1 Lux (centre to centre in metres on emergency escape routes)



- Assists the testing of emergency lighting in accordance with BS5266
- Key activated with 4 pre-programmed test intervals; 10 minutes, 30 minutes, 60 minutes & 180 minutes
- Clear LED digital display indication for duration test
- Optional audio buzzer alert for completion of duration test
- Compact design manufactured from antimicrobial material urea
- Operating Voltage: 220-240vac; 4A LED, 10A Incandescent, 6A Fluorescent

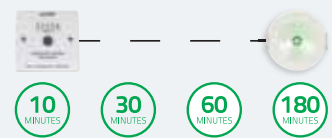
**4 PRE-PROGRAMMED TEST INTERVALS:**



Power Supply	220-240vAC, 50/60Hz
Programming	10, 30, 60, 180 minutes
Display	LED Light Tube
Mounting	Optional Flush or Surface
Current Rating	16A
Switching Capacity	4 amp LED, 10 amp Incandescent, 6 amp Fluorescent
Dimensions	86 x 86 x 33mm

- Assists the testing of emergency lighting in accordance with BS5266
- Key activated with 4 pre-programmed test intervals; 10 minutes, 30 minutes, 60 minutes & 180 minutes
- Clear LED indication for duration test
- Optional audio buzzer alert for completion of duration test
- Compact design manufactured from antimicrobial material urea
- 220-240vac Operation; 4A LED, 10A Incandescent, 6A Fluorescent

**4 PRE-PROGRAMMED TEST INTERVALS:**



Power Supply	220-240vAC, 50/60Hz
Programming	10, 30, 60, 180 minutes
Display	LED
Mounting	Optional Flush or Surface
Current Rating	16A
Switching Capacity	4 amp LED, 10 amp Incandescent, 6 amp Fluorescent
Dimensions	86 x 86 x 33mm

**EMTSLCD**  
EM Test Switch LCD



**EMTS**  
EM Test Switch



**EMBAT3.6V900**

EM Ni-Cd 3.6V 900mAh Battery

- Replacement battery for Ducer Emergency Lighting; EMD2WMEXHSIGN, EMD2WMEXSIGN



**EMBAT3.6V1200SER**

EM Ni-Cd 3.6V 1200mAh Battery

- Replacement battery for Ducer Emergency Lighting; EMDLED3WMBULK2



**EMBAT3.6V1500**

EM Ni-Cd 3.6V 1500mAh Battery

- Replacement battery for Ducer Emergency Lighting; EMLED5WMFLUSH, EMLEDWMLUSH, EMDLED3WMEXBOX



**EMBAT3.6V1500SER**

EM Ni-Cd 3.6V 1500mAh Battery

- Replacement battery for Ducer Emergency Lighting; EMLED3WMBULK2



**EMBAT3.6V1800SER2**

EM Ni-Cd 3.6V 1800mAh Battery

- Replacement battery for Ducer Emergency Lighting; EMST3WMSDL, EMLED3WMBULK, EMLED5WMBULK & EMDLED5WMBULK



**EMBAT3.6V1800SER**

EM Ni-Cd 3.6V 1800mAh Battery

- Replacement battery for Ducer Emergency Lighting; EM3WNMDLK, EM3WNMCDLK, EMD3WNMDLK



**EMBAT3.6V3000**

EM Ni-Cd 3.6V 3000mAh Battery

- Replacement battery for Ducer Emergency Lighting; EMNMIP40SPOT, EMNMIP40BSPOT



**EMBAT4.8V600**

EM Ni-Cd 4.8V 600mAh Battery

- Replacement battery for Ducer Emergency Lighting; EM2WMEXSIGN



**EMBAT3.6V900SER**

EM Ni-Cd 3.6V 900mAh Battery

- Replacement battery for Ducer Emergency Lighting; EMLED3WMBULK



**EMBAT4.8V3500SER**

EM Ni-Cd 4.8V 3500mAh Battery

- Replacement battery for Ducer Emergency Lighting; EM5WNMCDLK, EM5WNMDLK



**EMBAT6V1800**

EM Ni-Cd 6V 1800mAh Battery

- Replacement battery for Ducer Emergency Lighting; EM14WMCBULK, EM14WMCBULKMW



**EMBAT9.6V2200**

EM Ni-Cd 9.6V 2200mAh Battery

- Replacement battery for Ducer Emergency Lighting; EM9WNMSPOT2, EMD9WNMSPOT2



## THE ESSENTIAL RANGE

The new Essentials product group is just that - ESSENTIAL.





- Full 2K (4MP) Live View & Recording
- No Subscription or Additional Fees Required
- 116° Wide Angle Camera View
- 5000K Dual LED Lamps (25w)
- 2600 Lumen Output
- Motion or Human Activated Video Record
- Clear Two-Way Audio
- Remotely Activate or Dim LED Lamp
- IP65 Rated Ingress Protection
- Operates on 2.4GHz, 5 GHz Wi-Fi & Ethernet Network Connection
- Operating Temperature: -20 ~ +50°C

Supply Voltage	110 ~ 240VAC
LED Output	Up to 2600 Lumens
PIR Detection	270°
Number of PIRs	2
PIR Detection Range	10< metres
Viewing Angle	156°
Memory	128GB Max (8GB Supplied)
IP Rating	IP65
Construction	Aluminium & Polycarbonate
Dimensions (mm)	320mm x 170mm x 220mm

**GUARDCAMBLK2K** Black    **GUARDCAM2K** White  
Wi-Fi Security Camera with Twin Spots

- Wi-Fi Security light for remote viewing & recording
- High Definition digital camera
- Receive smartphone push notifications for motion activations
- 16 SMD High quality LED security lamp
- 5000k colour light with 1500 lumen output
- Time & Lux adjustment for LED security lamp
- Active PIR with 180° x 10 meter coverage
- 16GB Micro SD card for recording video clips
- Up to 400 video clips stored onto supplied 16GB storage (Expandable up to 128GB)
- IP55 Rated robust housing for external applications
- Requires 2.4GHz Wi-Fi

Supply Voltage	100-240VAC
Current Drain (activated)	0.4amp
Current Drain (quiescent)	0.005amp
LED Output	1500 Lumens
PIR Detection Angle	180 deg
PIR Detection Range	10 metres
Camera Exposure Control	Automatic
Camera White Balance	Automatic
Camera Sharpness	Automatic
SD Card Format	FAT/FAT32 Maximum 128GB
Image Format	MP4
IP Rating	IP55
Dimensions (mm)	290 x 160 x 140mm
Weight	1.206KG



**GUARDCAMLEDWIFI**  
Combined Wi-Fi Security Camera LED  
Light System



- Wi-Fi Security Light for Remote Viewing
- Full 1080p HD Live View & Recording
- Notifications via APP
- Wide Angle Camera View
- Clear Two-Way Audio
- 3000K LED Lamp
- 800 Lumen Output
- Remotely Dim or Turn On/Off The LED Lamp
- Motion Activated Video Record
- Manual Alarm Feature
- IP55 Rated
- Robust Metal Housing
- 8GB Memory Storage Provided (Up to 200 events)
- No subscription or additional fees required
- Requires 2.4GHz Wi-Fi or LAN network connection

Supply Voltage	80-260VAC
LED Output	800 Lumens
PIR Detection Angle	100°
PIR Detection Range	10< metres
Camera Angle	120°
Camera White Balance	Automatic
micro SD Card Format	FAT Maximum 64GB (Class10)
IP Rating	IP55
Wi-Fi	2.4GHz (IEEE 802.11 b/g/n)
Housing	Metal
Dimensions (mm)	Body, 70(W) x 180(H) x 65(D) mm, Bracket: 95(W) x 110(H) x 110(D) mm
Weight	1KG

**GUARDCAMDECOBLK** Black    **GUARDCAMDECO** Silver  
Combined Wi-Fi Security Camera LED Light System

- Detect the intruder, floodlight the area and initiate HD recording
- High Definition Camera
- 1500 Lumen LED lamp output
- Deliver a pre-recorded audible warning
- Capture up to 200 twenty second video clips with 8GB card supplied
- Maximum card capacity is 32GB

GuardCam LED is a complete all-in-one PIR floodlight, Camera, speaker and DVR system. Simply connect to mains power, fix to wall, set the time and date and switch on!

Supply Voltage	220-240VAC
Current Drain (activated)	0.4amp
Current Drain (quiescent)	0.005amp
LED Output	1500 Lumens
PIR Detection Angle	160 deg
PIR Detection Range	12 metres
Camera Exposure Control	Automatic
Camera White Balance	Automatic
Camera Sharpness	Automatic
SD Card Format	FAT/FAT32 Maximum 32GB
Image Format	AVI
IP Rating	IP44
Dimensions (mm)	180 x 190 x 315mm
Weight	1.206KG



**GUARD-CAM-LED**  
Combined Security LED Floodlight



- LED floodlight – 1500 lumen output
- 40,000 hours LED life
- Low energy 16.5w max. power consumption
- 160 degree PIR detector
- Wide spread illumination up to 120°
- Adjustable on time of 5 secs to 5 mins
- Adjustable lux – dusk to dark
- Adjustable floodlight and PIR direction – Horizontal and vertical axis
- Additional switching capability – 50W LED – 500W halogen
- Ideal for use with up to four NH150LED floodlights
- Weather proof, suitable for external use

Power Source	220 - 240VAC/50Hz
Power Consumption	16.5w (operational)
Detection Method	Passive Infrared Sensor
Detector Range	10M x 160 degrees
Light Output	1500 Lumens
Illumination Angle	120 degrees
Colour	5000K cool white
Time Adjustment	5 seconds to 5 minutes
Maximum Additional Load	LED 50W - Halogen 500W
IP Rating	IP55

**NIGHTHAWK**  
Low Energy LED Security Light

- 10W LED Flood Light in White or Black
- 4000K Colour Temperature
- 800 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 110mm H x 99 W x 27 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	10w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	800 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65



Black **NH10BS**      White **NH10WS**  
LED Security Light with Sensor 10W



- LED floodlight – 1500 lumen output
- Wide spread illumination up to 120°
- Low energy 16w maximum power consumption
- Adjustable floodlight direction – Horizontal and vertical axis
- Ideal for use with the NightHawk security light with the capability to switch up to 4 extra NH150 units
- Weather proof, suitable for external use

Power Source	220 - 240VAC/50Hz
Power Consumption	16w (operational)
Light Output	1500 Lumens
Illumination Angle	120 degrees
LED Light Output Colour	5600K cool white
Time Adjustment	5 seconds to 5 minutes
Maximum Additional Load	LED 50W - Halogen 500W
IP Rating	IP55

**NH150**  
Low Energy LED Flood Light

- 20W LED Flood Light in White or Black
- 4000K Colour Temperature
- 1600 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 117mm H x 101mm W x 24 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	20w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	1600 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65



Black **NH20BS**      White **NH20WS**  
LED Security Light with Sensor 20W





**NH30WS** White      **NH30BS** Black  
LED Security Light with Sensor 30W

- 30W LED Flood Light in White or Black
- 4000K Colour Temperature
- 2400 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	30w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	2400 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65



Black      **NH10B**      White      **NH10W**  
LED Security Light 10W

- 10W LED Flood Light in White or Black
- 4000K Colour Temperature
- 800 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 110mm H x 99 W x 27 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	10w
Light Output	800 Lumen
Colour	4000K
IP Rating	IP65



**NH50WS** White      **NH50BS** Black  
LED Security Light with Sensor 50W

- 50W LED Flood Light in White or Black
- 4000K Colour Temperature
- 4000 Lumen Output
- Built-in PIR: 110° Detection Angle, 8m Range with Pre-set 150 Seconds Activation Period
- Auto Lux Control
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Manual Override Function
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 216mm H x 186mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	50w
Detection Method	Passive Infrared Sensor
Detection Range	8M x 110 degrees
Light Output	4000 Lumen
Colour	4000K
Time Adjustment	Pre-set 150 Seconds
IP Rating	IP65

- 20W LED Flood Light in White or Black
- 4000K Colour Temperature
- 1600 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 117mm H x 101mm W x 24 D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	20w
Light Output	1600 Lumen
Colour	4000K
IP Rating	IP65



Black      **NH20B**      White      **NH20W**  
LED Security Light 20W



**NH30W**    White    **NH30B**    Black  
LED Security Light 30W

- 30W LED Flood Light in White or Black
- 4000K Colour Temperature
- 2400 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 143mm H x 123mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	30w
Light Output	2400 Lumen
Colour	4000K
IP Rating	IP65

- 1 Port per unit
- 100Mbps
- Plug and Play installation



Power Supply	220 - 240VAC/50Hz
Power Consumption	4.6W (Maximum)
Encryption	128-bit AES Encryption
Interface	1*10/100Mbps Ethernet Port
Range	Up to 300 meters/1000 feet over existing electrical wiring
LED Indicator	PWR, PLC, ETH
Certification	CE, FCC, RoHS

**PLA**  
Powerline Adapter



**NH50B**    Black    **NH50W**    White  
LED Security Light 50W

- 50W LED Flood Light in White or Black
- 4000K Colour Temperature
- 4000 Lumen Output
- 1 Meter Power Cord
- IP65 Ingress Protection for Exterior Use
- Robust Construction
- Textured Diffuser
- Adjustable Bracket
- Dimensions: 216mm H x 186mm W x 24mm D (Ex. Bracket)
- Includes Fixing Accessories

Power Source	220 - 240VAC/50Hz
Power Consumption	50w
Light Output	4000 Lumen
Colour	4000K
IP Rating	IP65

- A4 Document Box
- Wall Mountable
- Coated Finish
- Lockable door, 2 keys supplied
- Suitable for fire & emergency lighting system documents
- Suitable for CCTV documents
- Dimensions: 310 x 250 x 80 mm
- Weight: 2 KG



**DOCBOX**  
A4 Document Box

A photograph of a modern city street at night. The street is paved with asphalt and has white dashed lines. On the left, there is a sidewalk with green bushes and a modern streetlight. In the background, there are several tall buildings with glass facades, some of which are illuminated with blue and white lights. The sky is dark.

# TIME SWITCHES & HEATING CONTROLS

Sangamo offer a wide range of time switches and heating controls for domestic, commercial and industrial use. Our reputation for quality and reliability is unrivalled.

**SANGAMO**



## CHOICE PLUS PROGRAMMERS

For certain properties a simple programmer to activate the heating or hot water is all that is required. A Choice+ Programmer allows the occupant to specify when a call for heat is made in order to match their lifestyle and ensuring energy efficiency.

There is an option of 1 to 3 channel programmers in order to suit the system application; from single channel control suitable for combi boilers, to double control for independent heating and hot water, and finally a 3-channel option for when 2 heating zones are required.

In addition, each Choice+ Programmer has a selectable Service Interval function, which assists with compliance to the Gas Safety Regulations requiring landlords to carry out annual gas safety checks on appliances in rented properties.

- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1, 2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



**CHPPR2 WHITE**   **CHPPR2S SILVER**   **CHPPR2B BLACK**  
2 Channel Programmer with Digital Display and Service Interval Function



- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1, 2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped Systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Gravity
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

**CHPPR1 WHITE**   **CHPPR1S SILVER**   **CHPPR1B BLACK**

1 Channel Programmer with Digital Display and Service Interval Function



- 24 Hour, 5/2 Day and 7 Day Programmable
- 2 or 3 ON/OFF Periods
- 1, 2 or 3 Hour Boost
- Holiday Mode
- Pre-Programmed Schedule Ready for Use
- Summer/Winter Time Change
- Backlit Display
- Suitable for pumped systems
- With/without Service Interval Function
- 2A Switch Rating 240vAC

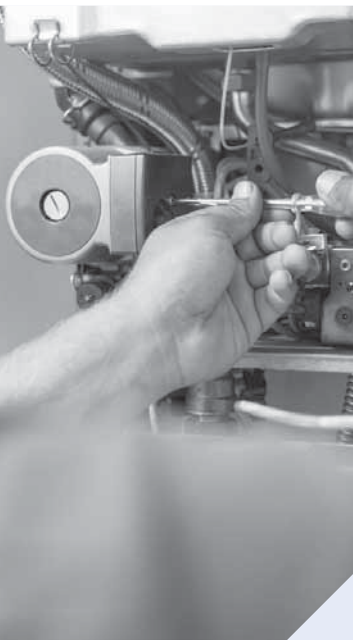
Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Battery Type	Lithium Cell CR1225
Enclosure Protection	IP30
Materials	ABS
Wiring	Fixed wiring only
Service Interval Function	Programmable
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Selection	On, Off, Auto, All Day
Heating System	Pumped
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



**CHPPR3 WHITE**   **CHPPR3S SILVER**   **CHPPR3B BLACK**

3 Channel Programmer with Digital Display and Service Interval Function





**CHOICE PROGRAMMERS**

Programmers are a key component of heating control systems. Since many homes are unoccupied for parts of the day, there is little point in heating them if no one is there to benefit. A programmer allows the occupant to specify when the heating comes on to match their lifestyle and their heating requirements.

For many people in the UK, this simply means firing up the heating in the winter months for a couple of hours in the morning, so the house is warm when they wake up, and then firing the heating up again in the evening so the house is warm when they get home until they go to bed.

- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate - simple plug in and replace
- Pumped or gravity system selectable

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Contact Type	1B, Micro-Disconnection
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped or Gravity
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



2 channel programmer. Designed for separate control of heating and stored hot water. This programmer can also be used with gravity systems.

**CHOICE PR2n**  
2 Channel Programmer



1 channel programmer. Ideal for use with combi boilers with only one heating zone. This programmer has volt free contacts.

**CHOICE PR1n**  
1 Channel Programmer



- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate - simple plug in and replace
- Pumped

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A
Contact Type	1B, Micro-Disconnection (Voltage Free)
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

- 24 hour, 5/2 day and 7 day selectable
- 2 or 3 ON/OFF periods selectable
- 1, 2 or 3 hour boost
- Advance to next programmed event
- Automatic Summer/Winter time change
- Standard wall plate - simple plug in and replace
- Pumped system
- Comply with Part L of the Building Regulations

Power Supply	230V AC, 50Hz
Operating Temperature	0°C to 40°C
Total Switch Rating	230V AC, 2(1)A (per channel)
Contact Type	1B, Micro-Disconnection
Battery Type	Lithium Cell CR2032
Enclosure Protection	IP30
Plastics	Thermoplastic, flame retardant
Insulation Class	Double
Wiring	Fixed wiring only
Backplate	Industry standard
Dimensions	140mm x 87mm x 37mm
Clock	12 hour am/pm, 1 minute resolution, accuracy +/- 1.5 sec/day
Program Resolution	10mins
Program Selection	Auto, On all day, On constant, off
Heating System	Pumped
Complies with	EN60730-1, EN60730-2.7, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



3 channel programmer offers 1 hot water channel and 2 separate heating zones, dependant on the homes plumbing but normally split upstairs & downstairs. This programmer meets the requirements of the building regulations for homes over 150m².

**CHOICE PR3n**  
3 Channel Programmer





CHOICE PLUS THERMOSTATS

A Choice+ room thermostat regulates and maintains a desirable temperature throughout the home by calling for heat as the temperature varies throughout the day.

Choice+ thermostats include TPI feature to ensure a maintained temperature by analysis of the heating and cooling periods. Choice+ programmable thermostats include Optimum Start and Delayed Stop for additional efficiency, heating and cooling for the time programmed.

These features combine to offer the best in heating comfort and energy efficiency when compared to traditional On/Off thermostats.

For installation convenience Choice+ wireless thermostats are available if a hardwired connection is not available in the intended location.

- Large Temperature Adjustment Dial
- Tamper Resistance Cover with Security Torx Screw
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Tamper Resistant	Yes; Tamper Resistance Cover with Security Torx Screw
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATT WHITE CHPRSTATTS SILVER CHPRSTATTB BLACK

Tamperproof Electronic Room Thermostat



CHPRSTAT WHITE CHPRSTATS SILVER CHPRSTATB BLACK

Electronic Room Thermostat



- Large Temperature Adjustment Dial
- Call for Heat Indication LED
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- 5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	86 mm x 88 mm x 38 mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

- Electronic Sensor for Accurate and Responsive Performance
- Tamper Resistance Cover with Security Torx Screw
- -5°C to 30°C Set Temperature Range
- 0.5°C and 1°C Temperature Swing Adjustment
- 10A Switch Rating 240vAC

Power Supply	230V AC, 50Hz
Operating Temperature	-5°C to 50°C
Current Rating	10A
Temperature Swing Adjustment	0.5°C and 1°C
Set Temperature Range	-5°C to 30°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Call for Heat Indication LED	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Tamper Resistant	Yes; Tamper Resistance Cover with Security Torx Screw
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATF WHITE CHPRSTATFS SILVER CHPRSTATFB BLACK

Electronic Frost Thermostat







- Large Dial with Digital Display
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- Frost Protection
- 3A Contact Rating (Volt Free)

Power Supply	2 x AA Batteries
Operating Temperature	0°C to 50°C
Current Rating	3A
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
Temperature Frost Protection	5°C
Temperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	86mm x 88mm x 38mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPRSTATD WHITE CHPRSTATDS SILVER CHPRSTATDB BLACK

Electronic Room Thermostat with Digital Display



- Large Dial with Digital Display
- Wireless Communication Between Thermostat and Receiver
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Comfort/Economy or ON/OFF Modes
- Battery Powered with Low Indication Status (Batteries Supplied)
- 5°C to 30°C Set Temperature Range
- Frost Protection
- Transmission frequency: 433 Mhz (80m Open Field, 30m Indoor Transmission)
- 16A Receiver Contact Rating(Volt Free)

Power Supply	2 x AA Batteries (Transmitter) & 240VAC, 50hz (Receiver)
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	1°C
Set Temperature Range	5°C to 30°C
Temperature Frost Protection	5°C
Temperature Display Range	3°C to 51°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Transmission Distance	80m open, 30m indoors
Transmission Frequency	433 Mhz
Dimensions	86 mm x 88 mm x 38 mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

CHPRSTATDRF WHITE CHPRSTATDRFS SILVER CHPRSTATDRFB BLACK

Wireless Electronic Room Thermostat with Digital Display



- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre-Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and Delayed Stop for Additional Efficiency
- Summer/Winter Time Change

Power Supply	4 x AAA Batteries
Operating Temperature	0°C to 50°C
Current Rating	3A
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Dimensions	140mm x 88.6mm x 32.1mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATDP WHITE CHPRSTATDPS SILVER CHPRSTATDPB BLACK

7 Day Programmable Room Thermostat



- Wireless Communication Between Thermostat and Receiver
- 24 or 7 Day Programmable
- 6 Time/Temperature Events per Day
- Permanent, Timed and Temporary Override Features
- Pre-Programmed Schedule Ready for Use
- Electronic Sensor for Accurate and Responsive Performance
- TPI (Time Proportional & Integral) Control for Heating Efficiency
- Optimum Start/ Delay Start and Delayed Stop for Additional Efficiency
- Battery Powered with Low Indication Status (Batteries Supplied)

Power Supply	4 x AAA Batteries & 240VAC, 50hz (Receiver)
Operating Temperature	0°C to 50°C
Current Rating	16A
Switching Differential	+/-0.5°C or +/-1.0°C selectable
Set Temperature Range	5°C to 35°C
Temperature Accuracy	+/-1°C
Temperature Display Range	0°C to 50°C
Frost Protection	Yes; 5°C
TPI (Time Proportional & Integral) Control for Heating Efficiency	Yes
Optimum Start/ Delay Start and Optimum Stop for Additional Efficiency	Yes
Programming Schedule	24 Hour or 7 Days
Available Operations	Up to 6 per Day
Sensor Type	Electronic Sensor for Accurate and Responsive Performance
Transmission Distance	80m open, 30m indoors
Transmission Frequency	433 Mhz
Dimensions	88mm x 88mm x 39.4mm
Complies with	EN60730-1, EN60730-2.9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



CHPRSTATDRF WHITE CHPRSTATDRFS SILVER CHPRSTATDRFB BLACK

Wireless Programmable Thermostat with Digital Display





## CHOICE THERMOSTATS

A room thermostat is used to regulate and maintain a desirable temperature throughout the home. It works by switching the heating system on and off as the temperature varies throughout the day.

For example, if the temperature drops below a certain level, a sensor in the room thermostat can be made to trigger the switch for the boiler and pump which will heat the radiators and in turn, the rooms in the home. If the room rises above a certain temperature, the thermostat will then turn off the central heating system so that your house will cool down to its desired temperature once more.



**CHOICE RSTAT1**  
Mechanical Thermostat



- Dual diaphragm temperature sensing element
- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range
- 2 Wire Installation
- Three terminal heating/cooling changeover

Power Supply	230V AC, 50Hz
Operating Temperature	10°C to 30°C
Current Rating	10(3) A
Temperature Differential	Approx 4°C
Operating Temperature Range	0°C to 40°C
Dimensions	L83 x H83 x D37
Complies with	EN60730-1, EN60730-2-9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC

- Dual diaphragm temperature sensing element
- Suitable for surface or pattress box mounting
- 10 to 30°C Set point range
- 2 Wire Installation
- Three terminal heating/cooling changeover
- Complete with tamperproof cover

Power Supply	230V AC, 50Hz
Operating Temperature	10°C to 30°C
Current Rating	10(3) A
Temperature Differential	Approx 4°C
Operating Temperature Range	0°C to 40°C
Dimensions	L83 x H83 x D37
Complies with	EN60730-1, EN60730-2-9, EMC Directive 2004/108/EC, LVD Directive 2006/95/EC



**CHOICE RSTAT1T**  
Tamperproof Mechanical Thermostat



- LCD showing room temperature
- Comfort/Economy or ON/OFF modes
- Frost protection
- Battery Powered (with battery low indication)
- 2 wire installation
- 5-30°C set point range

Power Supply	2 Alkaline batteries 1.5V (type AA)
Contact Rating	3A, 250V AC, (Volt free contact)
Power reserve	1 year
Temperature adjustment range	5-30°C
Temperature frost protection	5°C (Non adjustable)
Temperature display range, scale	3 to 51°C, 1°C
Operating Temperature	0 to 50°C
Storage Temperature	10-60°C
Switching Differential	+/- 1°C
Protection Rating	IP21
Wire Size	0.5-1.5mm2
Dimensions	86mm x 86mm x 32mm
Complies with	EN60730-1, EN60730-2-9, EMC directive 2004/108/EC, LVD directive 2006/95/EC



**CHOICE RSTAT3**  
Digital Thermostat





**CHOICE RSTAT3RF**  
Wireless Digital Thermostat



- 30 meters range to the Receiver
- Comfort/Economy or On/Off modes
- Unique RF address to avoid interference
- Clear LCD display showing room temperature
- Large control dial
- Frost protection
- 5-30°C set point range

<b>Transmitter</b>	
Power Supply	2xAA 1.5V batteries
Battery Lifespan	1 year
Temperature Adjustment Range	5-30°C
Temperature Display Range, Scale	3-51°C, 1°C
Temperature Frost Protection	5°C (non adjustable)
Switching Differential	+/- 1°C
Dimensions	86 x 86 x 32mm
Transmission Frequency	433Mhz
Transmission Distance	80m open, 30m indoors
Mounting Method	Wall/Surface
<b>Receiver</b>	
Power Supply	230Vac, 50Hz
Contact Rating	16A, 250Vac (Volt Free contact)
Insulation class	2
Flexible Wire Size	1.5mm <sup>2</sup>
Rigid Wire Size	1.5mm <sup>2</sup>
Dimensions	86 x 86 x 55, when mounted
Mounting	Wall using supplied backbox
<b>Transmitter and Receiver</b>	
Operating Temperature	0-50°C
Storage Temperature	10-60°C
Protection Rating	IP21



**CHOICE RSTAT5RF**  
Wireless Digital Programmable Thermostat



- 30 meters range to the Receiver
- Economy and Comfort Operation
- Unique RF address to avoid interference
- 24 hour or 7 day programmable
- 6 programmable events per day
- Button press back-lit operation
- Frost protection
- 5-35°C set point range

<b>Transmitter</b>	
Power Supply	4xAAA 1.5V Alkaline batteries
Battery lifespan	1 year
Temperature display range	5-35°C (increment 0.1)
Temperature control range	0- 50°C (increment 0.5)
Program time increment	10 minutes
Temperature accuracy	+/- 1°C
Switching Differential	+/- 0.5°C or +0/-0.1°C selectable
Operating Temperature	0 – 50°C
Clock Accuracy	<1sec / day
Protection Rating	IP30
Dimensions	110 x 104 x 21.5mm
Transmission Frequency	868Mhz
Transmission Distance	80m open, 30m indoors
Mounting	Wall or free standing using table stand
<b>Receiver</b>	
Power supply	230Vac, 50Hz
Contact rating	16A, 250Vac (Volt Free contact)
Insulation class	2
Flexible Wire Size	0.5-1.5mm
Rigid Wire Size	0.5-2.5mm
Dimensions	88 x 88 x 39.4mm
Wall mounting	Industry standard
Complies with	EN60730-1, EN60730-2-7, EN60730-11

- Bi-Metallic temperature sensing element
- Suitable for surface or switch box mounting
- -5 to 25°C set point range
- Tamper resistant cover fitted with accelerator heater

Power Supply	230 Vac, 50 Hz
Temperature control range	-5 to 25°C
Load rating (1-3)	10A / 250 Vac
Ambient Max	T50
Protection Rating	IP20
Dimensions	78mm x 78mm x 36mm



**CHOICE FSTAT1**  
Frost Thermostat

- Easy fixing to all hot water cylinders
- Suitable for use on uninsulated and foam lagged cylinders
- Cylinder strap and hooks provided
- Pipe mounting attachment included

Switch Action	SPPT Type 1CL
Switch Rating	16(4) A, 230 Vac
Sensing Element	Bi-metal
Temperature setting Range	0°C to 90°C
Differential	4°C +2°C
Max Surface Temperature	110°C
Protection	IP40
Fixing	Plastic coated spring wire (1800mm) with hooks



**CHOICE CSTAT**  
Cylinder Thermostat



POWERSAVER PLUS TIMERS

The primary application for the POWERSAVER+ is to control immersion heaters. In a typical UK household nearly 20% of a home’s energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher. The automatic control of a POWERSAVER+ can save on fuel expenditure and energy wastage when the user may forget.

Amongst a wide range of applications, the POWERSAVER+ models are also suitable for combi boilers, panel heaters, lighting including LED and towel rails.

The range includes a double pole switched fused option to incorporate an extra isolation feature which separates the live and neutral wires, adding additional safety for high loads.

- 30 Mins, 1 Hour and 2 Hour Boost Function
- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive AC240V
Boost Durations	30 Minutes, 1 Hour or 2 hours
Fixing	Single Pattress – Surface and Flush Mounting
IEC Protection Class	Class II
Temperature Rating	T40
Material	ABS
Operation Temperature	-10°C to 40°C
Fuse Rating	BS1362 13A Fuse
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730 BS EN60730



PSPBF WHITE    PSPBFS SILVER    PSPBFB BLACK

2 Hour Electronic Boost Timer & Fused Spur



- 30 Mins, 1 Hour and 2 Hour Boost Function
- Clear Indication LEDs
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	30 Minutes, 1 Hour or 2 hours
Fixing	Single Pattress – Surface and Flush Mounting
IEC Protection Class	Class II
Temperature Rating	T40
Material	ABS
Operating Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730



PSPB WHITE    PSPBS SILVER    PSPBB BLACK

2 Hour Electronic Boost Timer



PSPS WHITE    PSPSS SILVER    PSPSB BLACK

7 Day Time Switch with Boost

- 24 Hour, 5/2 Day & 7 Day Cycles
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- 16A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive 240VAC 2A LED Lighting 240VAC
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm <sup>2</sup> flexible and 4.0 mm <sup>2</sup> fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730



PSPSF24 WHITE    PSPSF24S SILVER    PSPSF24B BLACK

24 Hour Fused Spur Time Switch with Boost

- 24 Hour Programming
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm <sup>2</sup> flexible and 4.0 mm <sup>2</sup> fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730



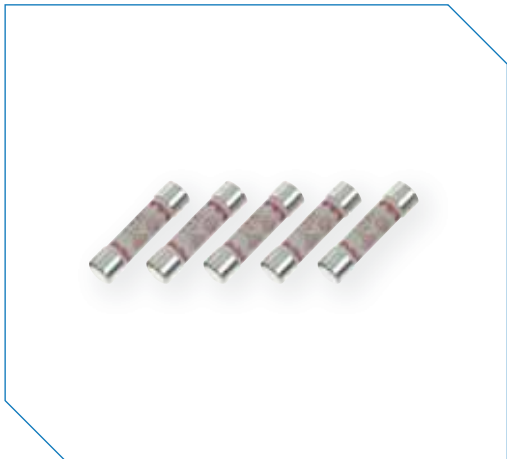
PSPSF247 WHITE    PSPSF247S SILVER    PSPSF247B BLACK

7 Day Fused Spur Time Switch with Boost

- 24 Hour, 5/2 Day & 7 Day Programming
- 10 On/Off Programs per Day
- Permanent Memory Reserve
- 15 mins, 30 mins, 1 Hour, 2 Hour, 4 Hour and 6 Hour Boost Function
- Clear Indication Display
- Button Lock Feature
- Summer / Winter time Change
- Single Gang Surface (Mount Box Included) or Flush Mounting
- Supplied with Replaceable BS1362 13A Fuse
- 13A Switch Rating 240vAC

Power Supply	AC220-240 50/60 Hz
Contact Rating	13A Resistive (3kW) 750W Incandescent, Halogen lighting 500W Fluorescent lighting 200W LED lighting 100W Compact Fluorescent lighting
Boost Durations	15 Minutes, 30 Minutes, 1 Hour, 2 Hours, 4 Hours, or 6 Hours
Memory Reserve	Permanently Reserves Settings
Terminals	Suitable for max. 2.5 mm <sup>2</sup> flexible and 4.0 mm <sup>2</sup> fixed cabling
IEC Protection Class	Class II
Temperature Rating	T40
Display	LCD
Material	ABS
Operation Temperature	-10°C to 40°C
Dimensions	86mm x 86mm x 35mm
Complies with	BS EN60730

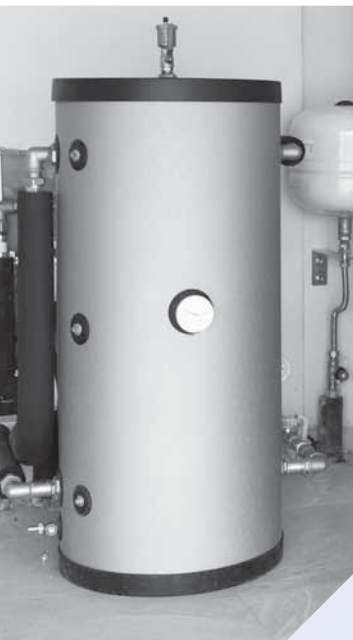
- Spare Fuses for PSPSF4 & PSPSF247
- Packs of 5
- BS1362 13A Fuse



PSPFUSE

Powersaver Plus Spare Fuses





## POWERSAVER CONTROLLERS

The primary application for the Powersaver range is to control immersion heaters. In a typical UK household nearly 20% of a home's energy cost is spent on heating hot water. Leaving an immersion heater on all the time can be a significant waste of energy that can drive this figure up to 25% or higher.

Immersion heaters are often rated at 3kw which, if left on permanently, can cost around 13p per hour/ £1.56 per day/ £9 per week/ £450 per year, so it is best to have control of your heating patterns.

Fitting a Sangamo immersion heater controller can reduce these costs by up to 50%, even more if the property can take advantage of a dual tariff electricity and controlled by the Powersaver Dual Flexi.

The Powersaver Boost and Select models are also suitable for LED lighting and towel rails.

- 24 hour, 5/2 day & 7 day selectable
- 10 On/Off Programs per Day
- 30 min, 1 hour & 2 hour multi-press boost function
- Fits directly into a single gang surface box
- Button lock feature
- Summer/winter time change

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive AC240V 2A LED Lighting AC240V
Fixing	Surface and Flush Mounting
Resolution of Programs	10 Minutes
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP00
Shock Protection	Class II
Case Material	ABS
Action Type	1B
Temperature Rating	T35
Operation Temperature	-10°C to 40°C
Memory Reserve	Permanent reserve setting
Display	LCD
Dimensions	87mm x 87mm x 35mm
Complies with	BS EN60730



**PSS2**  
Powersaver Select



**PSB2**  
Powersaver Boost



- 30 mins, 1 hour and 2 hour boost periods
- Switches appliance off automatically after boost period
- Fits directly onto a single gang pattress box

Power Supply	AC220-240 50/60 Hz
Contact Rating	16A Resistive AC240V 2A LED Lighting AC240V
Fixing	Single Pattress – Surface and Flush Mounting
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP00
Shock Protection	Class II
Case Material	ABS
Action Type	1B
Temperature Rating	T35
Operation Temperature	0°C to 40°C
Dimensions	87mm x 87mm x 35mm
Complies with	BS EN60730

- Suitable for single, dual and twin immersion elements
- Pre-set adjustable (ie minimise or cancel) programs for use with low rate tariffs (Economy 7, Economy 10 & Eco20:20)
- Direct upgrade to Horstmann E7 & E7Q and Sangamo Q7 controllers
- 24 hour electronic timer
- Automatic summer/winter time change
- Programmable boost function – 2 hours max

Power Supply	230V +10% / -15%
Frequency	50/60Hz
Power Consumption	1.2W
Contact Rating	13A Resistive 230V Suitable for immersion heaters up to 3kW
Contact Type	Micro-disconnection on control. Disconnection to immersion heater(s) via double pole rocker switch
Memory Reserve	3 years
Timing Accuracy	+/- 0.5 sec per day at +23°C
Operation Temperature	0°C to 35°C
Shock Protection	Class 1
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP30
Dimensions	169mm wide, 114mm high, 60mm deep (excluding rocker switch & buttons)
Complies with	BS EN60730



**PSDF2**  
Powersaver Dual Flexi 2







ROUND PATTERN TIME SWITCHES

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

S250 STANDARD RANGE

The original RPTS model for those that need simple on & off switching of up to 20A. The dial is 24 hour but contains a Day Omit device which skips the ON operation on selected days of the week. These switches come with either 2 or 3 sets of ON & OFF arms. To set the switch you simply loosen the centre screw, move the arms around the dial to match up with the switching times and re-tighten.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.



S250 STANDARD RANGE

- S254.2 Standard 3 Pin Time Switch, 2 On/Offs
- S255.2 Standard 4 Pin Time Switch, 2 On/Offs

- S254.3 Standard 3 Pin Time Switch, 3 On/Offs
- S255.3 Standard 4 Pin Time Switch, 3 On/Offs

Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Current Rating	20A resistive. More Switching Capacity info on request
Display	24 hour dial
Mounting	Surface
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Power Consumption	0.6W at 230V
Temperature Range	0° C to 50° C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: None
- Day Omit Dial: Yes (Omits the 'ON' operation)
- Temporary override (manual button)





ROUND PATTERN TIME SWITCHES

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Q550 STANDARD RANGE

The ‘red dial’ time switch. Sangamo RPTS with red print on the dial contain a 100 hour battery reserve. These switches offer a wider range of variations and options than the S250 Range.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.



- Temporary override (manual button)
- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: 100 hours
- Day omit dial



Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	24 Hour dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Day Omission	Selectable
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Period Between unlike Operations	15 minutes minimum
Period Between like Operations	105 minutes minimum
Day Omit Skips On Operation	Q554, Q555, Q559, Q563, Q586
Day Omit Skips Off Operation	Q557
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

Q550 STANDARD RANGE

- Q554.2 Standard 3 Pin Time Switch, 2 on/off
- Q554.3 Standard 3 Pin Time Switch, 3 on/off
- Q555.2 Standard 4 Pin Time Switch, 2 on/off
- Q555.3 Standard 4 Pin Time Switch, 3 on/off
- Q555.2110V 110v Standard 4 Pin Time Switch, 2 on/off
- Q557.2 Standard 4 Pin Time Switch, 2 on/off, omit off operation
- Q557.3 Standard 4 Pin Time Switch, 3 on/off, omit off operation
- Q559.2 Standard 4 Pin Time Switch, 2 on/off, early on on 1 day/week
- Q563.2 Standard 4 Pin Time Switch, 2 on/off Changeover Operations
- Q563.3 Standard 4 Pin Time Switch, 3 on/off Changeover Operations
- Q586.2 Standard 4 Pin Time Switch, 2 on/off Changeover Operations, early on 1 day/week



ROUND PATTERN TIME SWITCHES

Sangamo have manufactured the renowned RPTS from our Port Glasgow factory since 1951, having sold over 11 million switches and counting. These 20A switches are famous for their high capacity, quality and reliability.

We often hear from customers who have had switches installed for over 5 decades and often on their second use, having outlived the equipment they were being utilised for.

E850 STANDARD RANGE

Digital RPTS' combine the high capacity and reliability of the electro-mechanical models but provide full 7 day programming, allowing for more complex fixed time program schedules. The unit is easy & intuitive to program by painting in and wiping out segments on the dial face.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.



E850 STANDARD RANGE

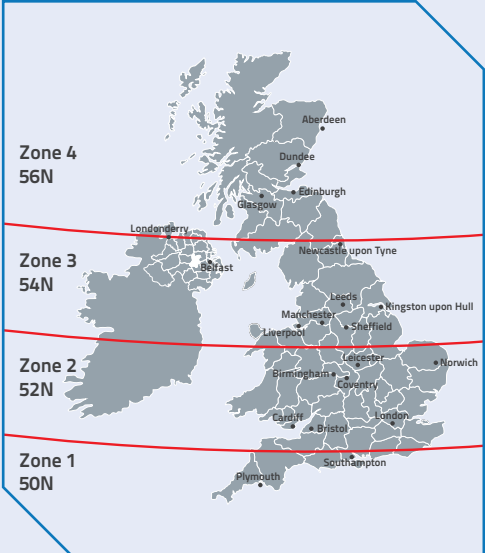
E854 Digital 3 Pin Time Switch, 96 Operations

E855 Digital 4 Pin Time Switch, 96 Operations

Power Supply	230V AC, 50/60Hz
Programming	96 Operations
Display	LCD
Mounting	Surface
Current Rating	20A resistive, More Switching Capacity info on request
Reserve	20 days (Rechargeable Battery)
Temp Override Facility	2hr Override On. Advance to Off.
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Holiday Mode	Suspends programs for 14 days, or indefinitely
BST/GMT Changeover	Automatic
Temperature Range	35°C
Live Parts Protection	Enclosure Protection
Dirt and Moisture Protection	IP20
Shock Protection	Class 11 ( functional and supplementary insulation)
Period Between ON/OFF Operations	15 mins
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)



- Programming: 7 day programme
- Up to 48 on and 48 off (96 operations per day)
- Each day can be programmed independently
- Holiday mode
- Auto BST/GMT changeover
- Current Rating: 20A
- Battery Reserve: 20 days
- Temporary override (manual button)



Q550 ASTRO/SUNTRACKER

Astro/Suntracker switches automatically adjust themselves to follow Sunrise/Sunset times throughout the year. This makes them ideal for controlling external and internal lighting loads up to 20A or 3,600W of LED lighting with no need for a sensor.

As these switches track the motion of the sun & not the time it should be set to GMT & left all year, so there’s no need to worry about summer & winter clock changes, the switch does it all itself. The month dial controls the brass sunset/sunrise arms automatically to keep the lights switching at the right time each day.

Sunset & Sunrise times vary through the length of the British Isles by as much as 40 minutes at certain times of year. Our RPTS Astro models come in 4 zone variations to make the switching times more accurate. Additionally, users can alter the longitude setting away from the 0° longitude line to focus the accuracy in further, if required.

2 on/off models have a second set of fixed time operating arms, allowing you to set your lighting to go off for a set period overnight while still benefiting from the sunset and sunrise programming.

All models also contain a 100 hour battery reserve.

3-PIN OR 4-PIN

3-pin switches have common clock & switch connections. 4-pin switches have independent clock & switch connections enabling the use of a different switching circuit voltage, a Volt Free Contact, in effect.



Q550 ASTRO/SUNTRACKER

- Programming: 24 hour with on/off operations
- Current Rating: 20A
- Battery Reserve: 100 hours



Power Supply	230V AC, 50/60Hz
Programming	24 hour programme with ON/OFF operations
Display	Solar dial
Mounting	Surface
Current Rating	20A resistive. More Switching Capacity info on request
Reserve	100 hrs (providing battery has been charged for 300 hrs)
Temp Override Facility	Selectable
Cable Size	6.0mm2
Timing Accuracy	5 mins/year
Temperature Range	0°C to 50°C
Live Parts Protection	Enclosure Protection
Type of Protection	IP20
Shock Protection	Class 1 (Product must be earthed)
Dial Calibration	15 min divisions
Setting Accuracy	+/- 3 minutes
Dimensions	Height (wall mounted) 136mm, width 105.7mm, projection 82mm, (Total height 146.5mm)
Complies with	BS EN60730

- Q550.13.11 Astro Zone 1, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
- Q550.13.12 Astro Zone 2, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
- Q550.13.13 Astro Zone 3, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation
- Q550.13.14 Astro Zone 4, 3 Pin Time Switch, 1 On/Off, Day Omit skips ON operation

- Q551.13.11 Astro Zone 1, 3 Pin Time Switch, 1 On/Off & optional early off
- Q551.13.12 Astro Zone 2, 3 Pin Time Switch, 1 On/Off & optional early off
- Q551.13.13 Astro Zone 3, 3 Pin Time Switch, 1 On/Off & optional early off
- Q551.13.14 Astro Zone 4, 3 Pin Time Switch, 1 On/Off & optional early off

- Q551.14.11 Astro Zone 1, 3 Pin Time Switch, 2 On/Offs
- Q551.14.12 Astro Zone 2, 3 Pin Time Switch, 2 On/Offs
- Q551.14.13 Astro Zone 3, 3 Pin Time Switch, 2 On/Offs
- Q551.14.14 Astro Zone 4, 3 Pin Time Switch, 2 On/Offs

- Q553.13.11 Astro Zone 1, 4 Pin Time Switch, 1 On/Off & optional early off
- Q553.13.12 Astro Zone 2, 4 Pin Time Switch, 1 On/Off & optional early off
- Q553.13.13 Astro Zone 3, 4 Pin Time Switch, 1 On/Off & optional early off
- Q553.13.14 Astro Zone 4, 4 Pin Time Switch, 1 On/Off & optional early off

- Q553.14.11 Astro Zone 1, 4 Pin Time Switch, 2 On/Offs
- Q553.14.12 Astro Zone 2, 4 Pin Time Switch, 2 On/Offs
- Q553.14.13 Astro Zone 3, 4 Pin Time Switch, 2 On/Offs
- Q553.14.14 Astro Zone 4, 4 Pin Time Switch, 2 On/Offs





BLUETOOTH DIN RAIL TIME SWITCHES

Bluetooth is a wireless communication protocol that allows programming of the switch using the free APP available on Android and IOS smart phones and tablets. This works the same way as contactless bank cards, oyster travel cards and mobile payment systems. The program is setup on the APP and transfers to the switch when the smart device is held in close proximity.

- Daily and Weekly programming
- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On/Off, Permanent On/Off
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



SC2813PR04

Astro Bluetooth 2 Module 1 Channel, 7 day Timer, 100 Operations



SC2821PR04

Standard Bluetooth 2 Module 2 Channel, 7 day Timer, 100 Operations



- Daily and Weekly programming
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	ON/OFF, Pulse, Cycle, Random, Extra On/Off, Permanent On/Off
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

- Daily and Weekly programming
- Astro (sunrise, sunset) program
- Switching capacity 16A per channel
- Zero-crossing, LED up to 600W
- Programmable via App (iOS and Android)
- 10 years battery reserve

Power Supply	230V AC, 50/60Hz
Programming	100 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 3,000W Halogen lamp 3,000W Fluorescent lamp uncompensated 2,600W Fluorescent lamp series compensated 2,600W Fluorescent lamp parallel compensated 1,300W Compact Fluorescent lamp 600W LED 230V AC 600W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/- 90 min.
Memory Locations	100
Minimum Interval	1 min
Program Security	unlimited
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



SC2823PR04

Astro Bluetooth 2 Module 2 Channel, 7 day Timer, 100 Operations





NFC DIN RAIL TIME SWITCHES

NFC (Near Field Communication) is a wireless communication protocol that allows you to program the switch using the free Sangamo Connect app on an Android NFC Smart phone.

This works the same way as contactless bank cards, oyster travel cards and mobile payment systems.

You set the program up on the app and hold the phone next to the switch to read, write or transfer programming times.

- Volt-free 16A changeover contact
- 4 memory locations
- Basic Astro programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	4 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF
Offset Astro Switching Time	+/- 90 min.
Memory Locations	4
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



72102NFC

Astro NFC 1 Module 1 Channel, 24 hr Timer, 4 Operations



**72113NFC**  
Standard NFC 2 Module 1 Channel, 7 day Timer, 56 Operations  
Also available: **72213NFC** (as above with 2 channels)



- Volt-free 16A changeover contact
- 56 memory locations
- Standard programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	56 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	ON/OFF, Pulse, Extra On/Off, Permanent On/Off
Memory Locations	56
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm

- Volt-free 16A changeover contact
- 56 memory locations
- Astro programming
- Works with Android NFC phones for programming
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	56 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 1,000W Fluorescent lamp parallel compensated 550W Compact Fluorescent lamp 200W LED 230V AC 200W
Reserve	10 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra On/Off, Permanent On/Off
Offset Astro Switching Time	+/- 90 min.
Memory Locations	56
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	90 x 36 x 63 mm



72103NFC

Astro NFC 2 Module 1 Channel, 7 day Timer, 56 Operations  
Also available: **72203NFC** (as above with 2 channels)







DIN RAIL TIME SWITCHES

All Sangamo's DIN Rail mountable time switches are designed for 35mm "Top Hat" rail. Switches come in 1, 2 or 4 modules, each module is 17.5mm wide, which fits the required width in the DIN enclosure.

Using the 25195 USB Hub and Easy Vue software or 25196 USB Hub with bluetooth and connect app programs can be transferred to a 25193 data key and then to one or multiple switches. 1 module switches do not require a Data Key as the fascia can be removed and slotted into the Hub directly.

Pulse Programming

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m 59s can be programmed into the unit. This feature appears on all standard switches.

- Volt-free 16A changeover contact
- 46 memory locations
- Module timer
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000 W Halogen lamp 1,000W Fluorescent lamp with electronic lamp ballast 500W Fluorescent lamp conventional lamp ballast 400W Compact Fluorescent lamp 300W LED 230V AC 300W
Reserve	10 years
Switching Functions	ON; OFF; Pulse; Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	46
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm



72112

Standard 2 Module, 1 Channel, 7 Day, 46 Operations  
Also available: **72212** (as above with 2 channels)



71111

Standard 1 Module 1 Channel, 7 Day, 46 Operations



- Volt-free 16A changeover contact
- 46 memory locations
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years

Power Supply	230V AC, 50/60Hz
Programming	46 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	6A Inductive@0.6pf Filament lamp 1,000W Halogen lamp 1,000W Fluorescent lamp w/ electronic lamp ballast 500W Fluorescent lamp w/ convent. lamp ballast 100W Compact Fluorescent LA 50W LED 230V AC 50W
Reserve	10 years
Switching Functions	ON; OFF; Pulse; Permanent On/Off
Pulse Length	00:01 up to 59:59 mm:ss
Memory Locations	46
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm

- Volt-free 16A changeover contact
- 300 memory locations
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 6 years
- Extra functions - special weekly programs, channel key assignment

Power Supply	230V AC, 50/60Hz
Programming	300 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000VA More Switching Capacity info available upon request
Reserve	6 years
Switching Functions	ON; OFF; Pulse; Cycle; Extra On/Off, Permanent On/Off
Pulse length - Pulse function (switching time)	00:01 up to 59:59 mm:ss
Pulse Length - Timer (man. switching)	0:00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 36 x 63 mm



25162

Standard 2 Module 1 Channel, Yearly Timer, 300 Operations





**26404**  
Standard 4 Module 4 Channel, 7 Day Timer, 300 Operations



- Volt-free 16A changeover contact
- 300 memory locations
- Module timer: Multiple applications from one switch
- Standard programming
- Works with key programming & EasyVUE connect (Key & hub are optional extras)
- Battery Reserve: 10 years
- Extra functions - Channel key assignment, accepts external inputs

Power Supply	230V AC, 50/60Hz
Programming	300 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	10A Inductive@0.6pf Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000VA More Switching Capacity info available upon request
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Cycle, Permanent On/Off
Pulse length - Pulse function (switching time)	00:01 up to 59:59 mm:ss
Pulse Length - Timer (man. switching)	00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	90 x 72 x 63 mm



**11002**  
Standard 1 Module 24 hr Timer



- Simple programming with 15 min captive segments
- Simple to read switching
- Manual override switch 'Permanent OFF/ Automatic/ Permanent ON'
- 100 hour battery reserve

Power Supply	230V AC, 50/60Hz
Programming	Daily
Display	LCD
Mounting	DIN
Current Rating	16A, 2.5amp Inductive @0.6pf
Switching Capacity	Filament lamp Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000W Fluorescent lamp series compensated 750W LED (230 V-) / CFL 200W
Reserve	100 hrs
Switching Functions	ON, OFF, Permanent On/Off
Switching Operation	96 per day
Program Security	unlimited (E2-PROM)
Minimum Interval	15 min
Temperature Range	-5°C to +50°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Dimensions	65 x 18 x 90 mm



These switches automatically adjust their sunset & sunrise times based on where you are. This can be set one of two ways;

**LOCATION** selecting the nearest city to you

**POSITION** by inputting your co-ordinates; Setting the nearest whole longitude & latitude.



ASTRO/SUNTRACKER

**71101** Astro 1 Module 1 Channel, 7 Day, 60 Operations

**72101** Astro 2 Module 1 Channel, 7 Day, 60 Operations

**72201** Astro 2 Module 2 Channel, 7 Day, 60 Operations

Power Supply	230V AC, 50/60Hz
Programming	60 Operations
Display	LCD
Mounting	DIN
Current Rating	16A
Switching Capacity	Filament lamp 2,000W Halogen lamp 2,000W Fluorescent lamp uncompensated 1,000VA Fluorescent lamp series compensated 1,000VA more Switching Capacity info available upon request
Reserve	6 years
Switching Functions	Astro ON/OFF, Night ON/OFF, Extra ON/OFF
Memory Locations	60
Offset Astro Switching Time	+/- 90mins
Minimum Interval	1 min
Program Security	unlimited (E2-PROM)
Temperature Range	0°C to 50°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Dimensions	71101: 45x17.5x58mm. 72101, 72201: 45 x 35 x 58 mm.

- Volt-free 16A changeover contact
- 60 memory locations
- Astro timer
- Simple programming
- Works with key programming & EasyVUE (Key & hub are optional extras)
- Battery Reserve: 6 years
- Key not required for 71101





PANEL TIME SWITCHES

The panel time switch range can also be surface or din rail mounted.

The analogue 16000 range are simple to use and are a cost effective timer. They are extremely easy to set, change and to view programmes. They are often used where multiple people are involved in setting and changing programs. For instance in church halls and similar applications. They are also fitted where the potential user is not comfortable using the latest digital technology, preferring the traditional pin type setting.

The 28000 range provides additional functionality in the same format to suit additional programming requirements.

Pulse Programming

Short term switching at fixed times. Ideal for school bells, sirens, churches, etc. A burst from 1 second up to 59m59s can be programmed into the unit. This feature appears on all standard switches.

- Volt-free 16A changeover contact
- 300 memory locations
- Programmable via App (iOS, Android and Windows)
- Battery Reserve: 10 years
- Comes ready for panel or surface mounting

Power Supply	230V AC, 50/60Hz
Programming	Daily, Weekly, or Astro
Display	LCD Back-lit
Mounting	Optional
Current Rating	16A
Switching Capacity	16A / 250 V – at cos = 1 6A with inductive load cos = 0.6 Filament Lamp, Halogen Lamp 400W Fluorescent Lamp with electron. lamp ballast 100W Fluorescent Lamp with convent. lamp ballast 100W LED (230V~)/CFL 50W
Reserve	10 years
Switching Functions	ON, OFF, Pulse, Cycle, Extra, Permanent, Astro
Pulse length - Pulse function (switching time)	0001 up to 59.59 mm:ss
Pulse/Pulse Length Cycle	0.00:01 up to 9:59:59 h:mm:ss
Memory Locations	300
Minimum Interval	1 min
Temperature Range	-30°C to +55°C
Enclosure	Self-extinguishing thermoplastic
Type of Protection	IP20 to DIN EN 60529
Class of Protection	2 when installed according to regulations
Switchboard flush mounting	Retaining clip in 68 x 68mm cutout
Dimensions	72 x 72mm



SC4411PR04

Astro Bluetooth 1 Channel 7 Day Digital Panel Timer  
Also available: [SC4421PR04](#) (as above with 2 channels)



PA16621  
Standard Panel 24 hr Timer (with battery)  
Also available: [PA16622](#) (as above with no battery)

- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 15 min captive segments
- Manual override with automatic return to program
- Contact status display

Power Supply	230V AC, 50/60Hz
Programming	24 hour
Display	Analogue
Mounting	Optional
Current Rating	16A
Switching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 2.5A 250V Incandescent lamp 2000W 250V
Reserve	100 hour
Switching Operations	96 per day
Temperature Range	-10°C to +50°C
Storage Temperature	-10°C to +50°C
Connection by cage terminals, section of conductors	0.5 to 4 mm2
Insulation class	2
Protection	IP20
Dimensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
Complies with	BS EN 60730

- Voltage free 16A changeover contact
- Suitable for Surface, Panel or Din rail mounting
- 100 hour battery reserve
- Programming by 1 hour captive segments
- Manual override with automatic return to program
- Contact status display

Power Supply	230V AC, 50/60Hz
Programming	7 Day
Display	Analogue
Mounting	Optional
Current Rating	16A
Switching Capacity	Resistive load 16A 250V Voltage free inductive load (cos = 0.6) 3A 250V Incandescent lamp 1000W 250V Squirrel-cage motor 350W 250V
Reserve	100 hour
Switching Operations	24 per week
Temperature Range	-10°C to +50°C
Storage Temperature	-10°C to +50°C
Connection by cage terminals, section of conductors	0.5 to 4 mm2
Insulation class	2
Protection	IP20
Dimensions	72 x 94.5 x 48.4 mm (Face 72 x 72mm)
Complies with	BS EN 60730



PA16921  
Standard Panel Mount 7 Day Timer with Battery  
Also available: [PA16922](#) (as above with no battery)



**143602**  
Module Enclosure

- 1-2 module
- IP40 protection
- 55 x 135 x 80mm
- Surface mounted
- Integral DIN-rail
- Compatible with 1 or 2 module: 11002, 71111, 72112, 72212, 72113NFC, 72213NFC, 25162, 71101, 72201, 72102NFC, 72103NFC, 72203NFC



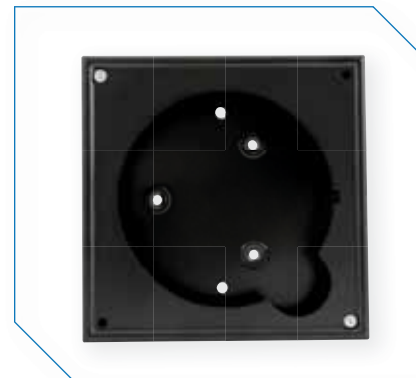
**143603**  
Module Enclosure

- 3-4 module
- IP40 protection
- 100 x 135 x 90mm
- Surface mounted
- Integral DIN-rail
- Suitable for 2 module product applications where Contactor will be used.



**143541**  
Module Enclosure

- 4-6 module
- IP40 protection
- 140 x 135 x 90mm
- Surface mounted
- Integral DIN-rail
- Compatible with 26404



**110469**  
FD930 Conduit Box Time Switch

- Will accept 3/4in or 20mm conduit
- Fixings supplied
- Robust steel construction with black enamelled finish
- Compatible with S250, Q550 & E850 ranges



**25193**  
Programming Data Key

- Data key for use with digital time switches that have key programming feature
- Used to load settings on single or multiple sites where the same product type is used
- Compatible with models ; 72101, 72201, 72112, 72212, 23871, 23872, 25162, 26404
- Not required for 71101, 71111



**25196**  
Programming Interface

- The Easy Vue Hub with Bluetooth can be used to program your switch with a blank programming key via PC, using the Easy-Vue software, or Android smartphone, using the Sangamo Connect app
- Compatible with models ; 71101, 72101, 72201, 71111, 72112, 72212, 23871, 23872, 25162, 26404



## ESP TRAINING DAYS

### MAGDUO Fire System Programming

Two-Wire fire alarm systems are based on standard conventional system technology. Unlike standard conventional four wired systems where the detectors, call points and alarm devices for each zone are wired on separate circuits, MAGDUO utilises intelligent Two-Wire technology, which allows all devices to be wired on the same set of two-core zone cables back to the control panel - enabling it to use a single circuit per zone both for detection and to power the sounders. This advanced technology can reduce both installation and material costs.

During the one-day MAGDUO training course, attending contractors will benefit from a series of wiring tutorials and will be trained on panel configuration, panel operations and device set up. They will also be given an overview of BS5839-1:2017

### Addressable Fire System Programming

Our Fire System Programming training days are aimed at competent contractors who already possess a good knowledge of BS5839 fire installation and commissioning requirements. From entry onto this course we will cover the basic programming requirements for our 2 Loop and 4 Loop fire systems, loop addressing, networking arrangements and Input/Output setups.

The above training days will be held at our purpose built showroom located in Redditch.



Elite Security Products  
Unit 7, Target Park,  
Shawbank Road, Lakeside,  
Redditch B98 8YN  
Tel: +44 (0) 1527 51 51 50  
Fax: +44 (0) 1527 51 51 43  
sales@espuk.com  
www.espuk.com

Elite Security Products Ireland  
Unit 1B, Three Rock Road,  
Sandyford Industrial Estate,  
Dublin, Ireland  
Tel: +353 (1) 5577 290  
Fax: +353 (1) 2811 224  
sales@espi.ie  
www.espi.ie

Scolmore Dubai  
Lake Central Tower,  
Office 1803, Business Bay,  
Dubai, UAE  
UAE Office: +971 4589 6552  
Mob: +971 52 451 1164  
sales@scolmoredubai.com  
www.scolmoredubai.com

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