Groupmaster Detectors

IP20

This range of sensors are able to control a number of compatible luminaires and replace the previous 'Intellect' Groupmaster units. Groupmaster provides the opportunity to utilise intelligent lighting controls where it is not possible to use individual intelligent luminaires, perhaps for reasons of budget constraints. Groupmaster provides the benefits and set up features of the ILS 'Intelligent lighting system', but with reduced equipment costs. Supplied as a stand alone unit, each Groupmaster can operate a number of luminaires fitted with switching or digital dimming control gear, sharing light level and on/off control signals. Although offering less flexibility than using individual intelligent luminaires, as special features such as communication or background light mode are shared, Groupmaster provides a cost effective solution.

- Competitive energy management package
- Energy saving - typically between 50% and 70%
- Group operation of on/off and light level control
- Presence/absence detection, daylight linking and constant illumination
- Easy to set-up minimising installation time
- Absence functionality via manual wall switch or hand held override maximising energy efficiency
- Individual sensors or communicating versions linked by BUS wiring loop

Standard System Features

Groupmaster Detectors are supplied as a stand alone control unit, for surface or recessed mounting into ceiling systems. System features depend on the exact sensor selected the may include:

Groupmaster Functions (variant dependent)

- Absence function
- Occupancy detection
- Daylight linking
- Constant illumination
- Illumination control
- Infra-red system set-up
- Stand alone operation or BUS loop communication
- Background light mode

System Components

- Groupmaster Sensor
  Take care to select appropriate switching or dimming variant.
- Luminaires
  Compatible luminaires fitted with digital high frequency dimming or switching control gear. A comprehensive list of luminaires suitable for use with Groupmaster can be provided by contacting our technical support and application department.

System Design and Installation

- Groupmaster system lighting design is carried out exactly as a conventional system would be, selecting compatible luminaires that are available fitted with high frequency dimming or switching control gear
- Light switches are not essential, although a recognised means of isolation is required to facilitate maintenance and re-lamping
- Groupmaster units should be located in the most appropriate position for detection purposes.

  In large areas this is generally in the centre of each group.

  In small areas, it is likely to be more beneficial over the task area
- A mains power supply is connected to the luminaires and Groupmaster units
- An additional 2 core communication BUS cable is required to link control units in ILS Groupmaster installations. Polarity must be observed when connecting the BUS cable to each Groupmaster unit
- Where ILS Groupmaster sensors are linked with a BUS wiring loop a BUS power supply will be required
- The sensors are set up using the 2-way digital programmer (LCSQSP)
- We recommend that you contact our technical support and application department for advice on design and system application as Groupmaster is highly project specific

LCSQSP

LCSQC

LCSQS

BPS100

BPS200

Wall Plate LCSWP3S

Stand Alone High Level PIR Detectors

These high level PIR and photocell detector are a superb addition to the range for the control of luminaires in high ceiling applications such as warehouses, factories and large retail premises.

Available as a flush fit recessed unit or with a surface mount housing, the detector can be mounted remotely or integrated onto the appropriate luminaire and is available in DSI or DALI digital dimming compatible format as well as a simple 6A switching variant.

For high mounting heights the detection pattern has a 1 to 1 ratio of detection beam diameter to mounting height, such that at 16m mounting height the detection zone diameter on the floor is 16m.

For mid range mounting heights there is a family of sensors with a lens suitable for up to 12m heights with a detection cone diameter of 1.75 x height.

Flush mount option

Surface mount option

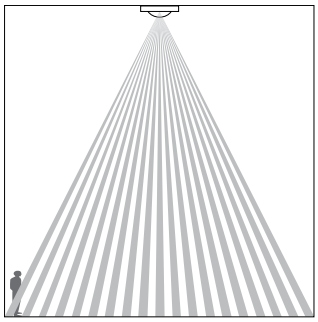
These detectors can be used to control up to 15 or 25 (model dependent) digital dimming ballasts. It is supplied with factory default settings which may suit the majority of installations however it has the facility for the time delay, light level and other commissioning parameters to be set via the 2-way digital programmer (LCSQSP).

This sensor can be supplied integrated onto the Linergy range of high efficiency T5 luminaires, simply add the 'IHP' prefix to the luminaire part number, the luminaire control gear suffix will dictate the DSI, DALI or Switched option.

Please contact your local Eaton representative or our sales team for further information on the controls and their compatibility with other luminaire ranges.

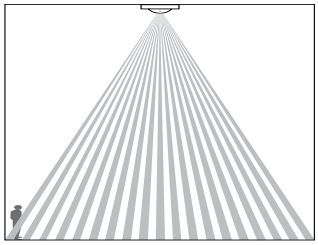
The DALI versions now have a default 100 hour lamp burn in period to operate the lamp at 100%. This can be reactivated following lamp changes with the I.R. master programmer.

Maximum recommended mounting height 16m



360° cone shaped detection pattern diameter at floor = 1 x height

Maximum recommended mounting height 12m



360° cone shaped detection pattern diameter at floor = 1.75 x height

Mains Voltage Detectors

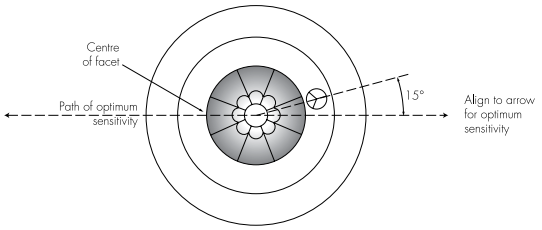
A selection of standard mounting height microwave and PIR sensors with and without photocells are also available. Please refer to the catalogue part number table on page 441.

The maximum recommended mounting height for these is 3m, producing a detection diameter from the PIRs of 2.4 x mounting height at the floor level.

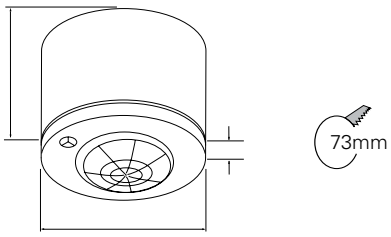
These are mains voltage sensors with the facility for manual dimming override on the digital dimming variants via a retractive switch.

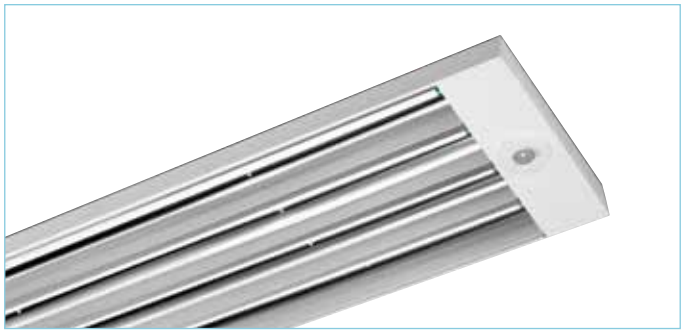
Refer to the manual dimming function operation on page 442.

A latching switch may also be placed in parallel to override the occupancy detection.



Dimensions





Linergy II with Integral Sensor

Accessories

Catalogue Numbers

Description	Cat No
Digital 2 way programmer	LCSQSP
Infrared user controller	LCSQC
Infrared programmer	LCSQS

Catalogue Numbers

Cat No	Description
Control BUS Loop Components and Accessories	
BPS200	BUS Power supply 200 Device Capacity
BPS100	BUS Power supply 100 Device Capacity
LCSWP3S	Wall Plate override switch 3 scenes, Dim/Brighten, Off
Groupmaster Detectors	
Stand Alone Mains Rated Sensors: High Mounting Height up to 16m	
IHPRDF	PIR and Photocell High Level 230V DSI Flush Mount
IHPRDS	PIR and Photocell High Level 230V DSI Surface Mount
IHPDDF	PIR and Photocell High Level 230V DALI Flush Mount
IHPDDS	PIR and Photocell High Level 230V DALI Surface Mount
IHPSF	PIR and Photocell High Level 230V 6A Switching Flush Mount
IHPSS	PIR and Photocell High Level 230V 6A Switching Surface Mount
ILSIHPDDF	PIR and Photocell High Level 230V DALI Flush Mount with BUS loop connectivity
ILSIHPDDS	PIR and Photocell High Level 230V DALI Surface Mount with BUS loop connectivity
Stand Alone Mains Rated Sensors: Mid Mounting Height up to 12m	
IMPRDF	PIR and Photocell Mid Level 230V DSI Flush Mount
IMPRDS	PIR and Photocell Mid Level 230V DSI Surface Mount
IMPDDF	PIR and Photocell Mid Level 230V DALI Flush Mount
IMPDDS	PIR and Photocell Mid Level 230V DALI Surface Mount
IMPSF	PIR and Photocell Mid Level 230V 6A Switching Flush Mount
IMPSS	PIR and Photocell Mid Level 230V 6A Switching Surface Mount
ILSIMPDDF	PIR and Photocell Mid Level 230V DALI Flush Mount with BUS loop connectivity
ILSIMPDDS	PIR and Photocell Mid Level 230V DALI Surface Mount with BUS loop connectivity
Stand Alone Mains Rated Sensors: Standard Mounting Height, up to 3m	
IPRDF	PIR and Photocell 230V DSI Flush Mount
IPRDS	PIR and Photocell 230V DSI Surface Mount
IPDDF	PIR and Photocell 230V DALI Flush Mount
IPDDS	PIR and Photocell 230V DALI Surface Mount
IPSF	PIR and Photocell 230V 6A Switching Flush Mount
IPSS	PIR and Photocell 230V 6A Switching Surface Mount
IMDS	Microwave and Photocell 230V DSI surface/semi-rec mount
IMSS	Microwave and Photocell 230V 10A Switching surface/semi-rec mount
ILSIPDDF	PIR and Photocell 230V DALI Flush Mount with BUS loop connectivity
ILSIPDDS	PIR and Photocell 230V DALI Surface Mount with BUS loop connectivity

Inrush current on LED luminaires can limit the number of luminaires that can be linked to a switching sensor
For further information contact our technical support and application department on 01302 303240 or email LightingTechnicalUK@Eaton.com