Integrated IP Sensor

Integrated Occupancy and Photocell Sensors
With the lighting load of a commercial building accounting for around 30% of the energy to run it, reducing the lighting load through controls and daylight harvesting can have a significant effect in reducing the energy consumed. This is a win win where the building operator reduces running costs, the occupant receives an improved lighting scheme and it is also of benefit to the environment.

Full dimming and daylight harvesting functions are provided by the Intelligent Lighting System described on page 429 and the LCM on page 448.

Standard Height Integrated IP Sensor
The IP sensor provides basic PIR occupancy detection and a photocell for daylight threshold switching.

The daylight threshold is set so the sensor will hold off the luminaire if there is sufficient ambient light.

If there is insufficient ambient light and occupancy is detected by the PIR the luminaire will be switched on. The luminaire will remain on while occupancy is detected and then for the set time delay after no further occupancy.

Setting the time delay and light level threshold is achieved by 2 rotary potentiometer on the sensor head.

The standard sensors have a recommended mounting height of up to 3m and create a detection cone with a diameter of 2 x mounting height on the floor for seated activity, 2.4 x mounting height for walking towards the sensor and up to 4 x mounting height for walking across the detection zone.

Common Features of the Standard and Integrated ‘IP’ Sensors:
- Elegant sensor head linked to a slimline control module via RJ plug for simple integration into luminaires
- The sensor heads are retained by simple spring clips in the requisite hole cut out of ~28mmØ
- A photocell for threshold light level switching control with adjustment from 10 to 2000 lux via the rotary potentiometer on the sensor head
- They can be stand alone within a luminaire or operate as master/slaves with appropriate wiring (available on request)
- The master slave arrangement takes the lux reading of the master only, the slaves operate on occupancy only
  It is recommended to position the master furthest from the natural light so as not to cause slave luminaires to be over dimmed
- The time delay can be set between 15 seconds and 30 minutes using the rotary potentiometer on the sensor head
- The ambient temperature range is -25° to +50° (luminaire ambient range may differ)

Luminaire Range Compatibility
The ‘IP’ sensor is a standard option on Crompack 5 battens and Modulay recessed luminaires used with louvre accessories.

It provides switching with occupancy on HF control gear and can invoke “corridor function” when used with compatible dimming control gear.

For further information contact our technical support and application department on 01302 303240 or email LightingTechnicalUK@Eaton.com