



HC019V/I

Fixture Built-in Microwave Sensor

Photozell Advance



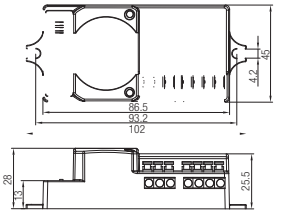
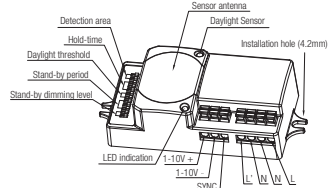
Introduction

This product utilises photocell advance technology to realise occupancy and true automatic photocell functions in one product. The patented technology allows luminaire design to be simplified as the luminaire body no longer needs to be drilled to accept a photocell for assessing the daylight condition. Ideal for applications such as communal and stairwell areas on social housing projects; this product is designed to be enclosed within the luminaire so naturally offers security against vandalism and degradation which can be unwanted factors when using external lighting control components.

The light will be switched off eventually if ambient daylight is sufficient, no matter it is during hold-time or stand-by time, with or without motion.

Technical Specifications

Table with 2 columns: Product type, Operating voltage, Switched power, Stand-by power, Detection settings, Hold time, Stand-by time, Stand-by dimming level, Daylight threshold, Detection area (DxH), Microwave frequency, Microwave power, Warming-up time, Operating temperature.



Dimensions (mm)

Installation

Please read this manual carefully before installing the microwave sensor and siting the luminaire.

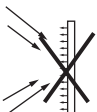
Both the microwave sensor (antenna) and the photocell elements of the product must be in front of any metal work and have full line of sight to the cover/diffusing element of the fixture for trouble-free operation.

After installing the sensor, it is highly recommended that the luminaire is tested for compatibility and correct operation of all components.

Note: If testing under laboratory conditions, the unique nature of this product requires full bandwidth of the visible and invisible parts of the electromagnetic spectrum, therefore it is not recommended to attempt daylight simulation with artificial light sources.



Not suitable for use with Incandescent or Halogen lamps



Not suitable for use in installations where glass is treated for reflection of infrared radiation

Diagram 1. Typical layout - in front of LED PCB

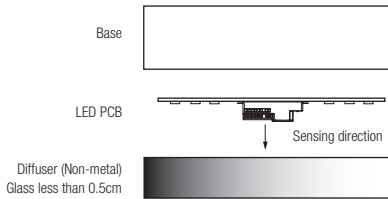
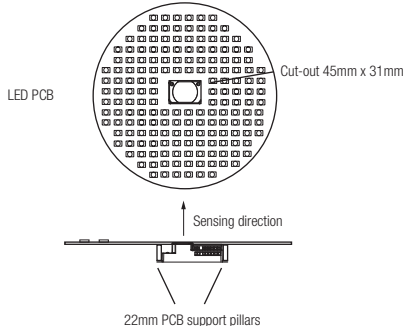


Diagram 2. Typical layout - behind LED PCB with cut-out



Preparation of Luminaire

1. Positioning

This microwave sensor is ideal for use with LED luminaires with the following considerations:

For simple mounting, the sensor may be placed on the LED side of the LED PCB. The microwave sensor will not be able to 'see' through any metal components of the fixture. (See diagram 1 opposite).

For shadow-free operation, it is recommended that the LED PCB is designed with a viewing window for the sensor so that it may fit flush (or slightly proud) of the LED PCB. (Please refer to diagram 2)

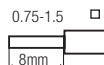
2. Configure the luminaire

Referring to the wiring diagrams overleaf, it is best to consider terminations of the luminaires offered to the installer dependant on system or project design. If in any doubt, it is recommended that all 7 terminals of the sensor are made accessible to the installer so that all of the features may be used if required.

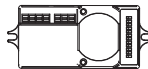
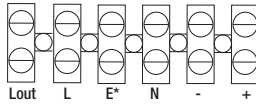
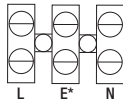
3. Wiring

To assist with installation, Hytronik use push-wire style terminals. It is recommended that single core (1/0.8mm for example) is used for making the connections to the sensor. The full specification for the wiring terminal is:

Wire preparation



Terminations and wiring diagrams



*Earth if required - (no earth connection necessary on HC019W/I)