LPS-002
Light Level & PIR Sensor

This is a dual function module combining the features of the ALS-002 and PRS-002 into one package. The 8 bit Light Level Sensing function provides a means of measuring ambient light levels either for monitoring or control purposes. This is not intended to provide an absolute measure of Lux levels but rather a repeatable measure of local light levels to enable practical operations such as dusk/dawn lighting or curtain control. The PIR sensing function provides a means of detecting presence, for example to determine room occupancy state.

As with other IDRATEK modules a range of 'Reflex' functions is provided to allow control of other network devices based on light level and PIR state conditions.

Light Sensor Charactersitics
- Module output range: 0 (dark) - 255 (bright)
- Resolution over range: 8 bits monotonic
- Spectral response of sensor: similar to human eye (~480-650nm)
- Measurement characteristics: Logarithmic with additional internal time response damping (digitally adjustable)

PIR Sensor Charactersitics[1]
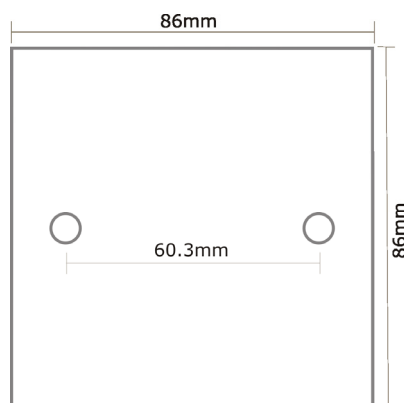- Detection cone: 82°V x100°H
- Detection zones: 64
- Range: 5m

Functional – Light Level
- Light level value can be interrogated at any time
- Four independent event triggers:
  - Light level equals or exceeds user defined 'High' limit
  - Light level equals or falls below user defined 'Low' limit
  - Light level difference exceeds user defined 'Delta' limit (auto-datuming)
  - Time interval trigger (ranges: 1-127 seconds/1– 127 minutes)
- User defined trigger enabling pattern
- Each event trigger can generate a pre-defined response and/or several user programmable responses

Functional – PIR
- PIR state can be interrogated at any time
- PIR state change trigger
- Mode programmable trigger gating:
  Eg: trigger on PIR->Low, trigger on PIR->High, trigger on either transition, trigger and latch
- User definable 'ON' dwell period
- PIR trigger can generate a pre-defined response and/or several user programmable responses
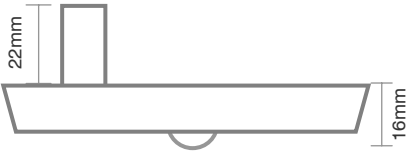
General
- Status/PIR indicator LED
- Initialise trigger
- In-situ reprogrammable firmware

Electrical
- Operating voltage 12-15V DC
- Current consumption 9mA (nominal)

86mm

60.3mm

86mm

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Environmental
- Operating temperature −10°C to +45°C
- Operating humidity 5% to 95% (non-condensing)
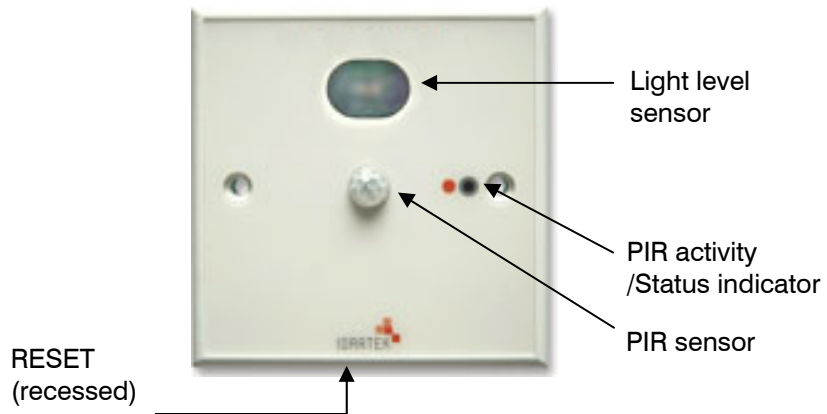
Mechanical
- Designed to fit UK standard 35mm deep electrical pattress
- 60.3mm fixing centres using standard M3.5 screws

[1] Manufacturers Data Sheet

Interfaces (front)

Light level sensor

PIR activity /Status indicator

PIR sensor

RESET (recessed)

Interfaces (rear)

IDRANet Connector

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