



IDRATEK

INTELLIGENT AUTOMATION

LPS-001

Light Level & PIR Sensor

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The information in this document is provided for guidance only. IDRATEK Ltd reserve the right to make any necessary changes, without notice, in order to improve the quality of their products.

This is a dual function module combining the features of the ALS-001 and PRS-001 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 Characteristics

- 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

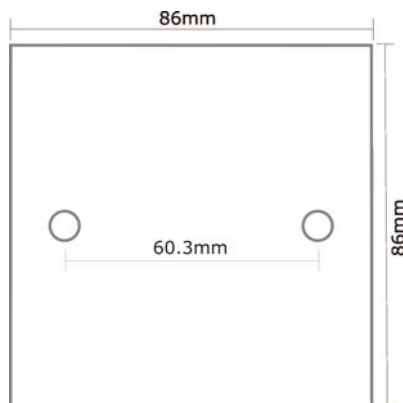
PIR Sensor Characteristics¹

- 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



Electrical

- Operating voltage 12-15V DC
- Current consumption 19mA (nominal)

Environmental

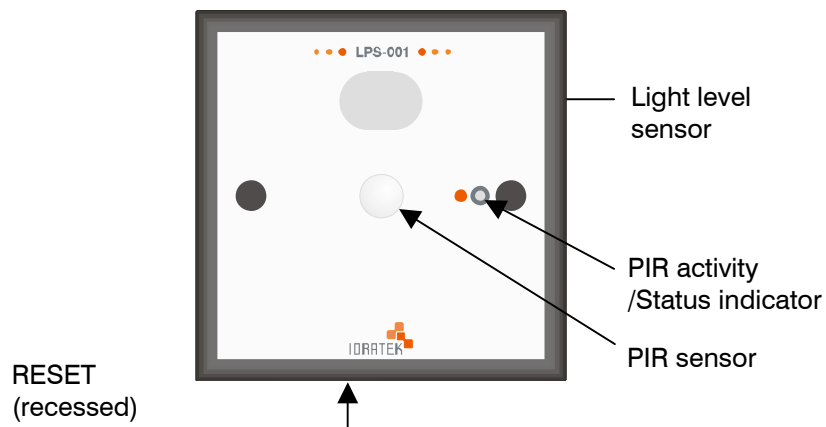
- Operating temperature -10°C to $+45^{\circ}\text{C}$
- Operating humidity 5% to 95% (non-condensing)

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)



Interfaces (rear)

