



IDRATEK

INTELLIGENT AUTOMATION

BRS-002

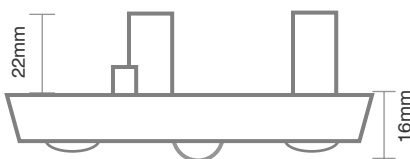
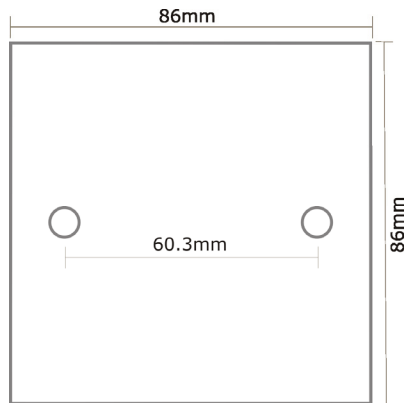
**PIR + Light Level + Temperature +
Relative Humidity + 2x Digital inputs
+ 2x Buttons + 2x LEDs + 2x Relay driver**

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This module packs a full range of high calibre sensory functions together with push buttons, LED indicators and relay drive capability into a single pattress format module. Effectively combining the capabilities of the PLH and DRB modules, this unit is suited for use in a location where a comprehensive sensory suite is required together with some simple user interaction and local power switching, but where perhaps a DFP type module is unwarranted (for example in a passageway or toilet).



PIR Sensor Characteristics¹

- Detection cone: 82°V x100°H
- Detection zones: 64
- Range: 5m

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

Temperature Sensor Specifications¹

- Range: Beyond module operating limits (of -10°C to +45°C)
- Resolution: 0.03125°C
- Accuracy: +/- 0.5°C over module range
- Internal sensor sampling period: ~4 seconds

Relative Humidity (RH) Sensor Specifications¹

- Range: Beyond module operating limits (of 5% to +95%)
- Raw data resolution: 12bit
- Accuracy: +/- 2% over module range (after linearisation)
- Internal sensor sampling period: ~4 seconds

Digital I/O

- 2 * Positive Click Push Button Inputs
- 2 * General Purpose LED Indicator Outputs
- 2 * Non-Isolated Digital Inputs with pulse counting capability
- 2 * Relay Drive Outputs (for separate XRM/XTM plug-in module)

Functional

- All sensors and digital I/O can be interrogated at any time
- Mode programmable trigger gating:
Eg: trigger on PIR->Low, trigger on temperature->High, trigger on either transition, trigger and latch on digital signals
- User definable PIR 'ON' dwell period
- Triggers can generate pre-defined responses and/or arbitrary user programmable responses
- 18 independent event triggers:
 - PIR state change
 - 2 x Digital Inputs state change
 - 2x Button Inputs state change
 - Temperature High/Low/Delta/Time interval
 - Relative Humidity High/Low/Delta/Time interval
 - Light level High/Low/Delta/Time interval
 - Module Initialise trigger
- User defined trigger enabling pattern
- Pulse counting capability on digital inputs
- Status/PIR indicator LED
- In-situ reprogrammable firmware

Electrical

- Operating voltage 12-15V DC
- Current consumption 11mA (nominal), rising to 90mA driving fully on XRM-001 @15V supply.

Environmental

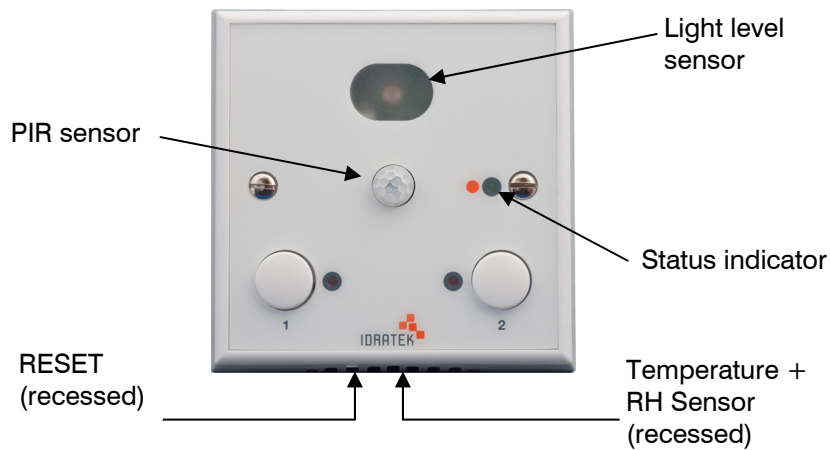
- Operating temperature -10°C to +45°C
- Operating humidity 5% to 95% (non-condensing)

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)



Interfaces (rear)

