



IDRATEK

INTELLIGENT AUTOMATION

PTH-001

PIR + Temperature + Relative Humidity

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This module combines PIR motion sensing, high resolution temperature and relative humidity sensing in one package. Saving space and cost where both PRS and THS module functions are required (eg. for climate control applications). As with other IDRATEK modules a range of 'Reflex' functions is provided to allow control of other network devices based on motion, temperature and relative humidity conditions. Accurate dewpoint calculation is possible due to co-location of humidity and temperature sensing elements.



PIR Sensor Characteristics¹

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

Temperature Sensor Specifications¹

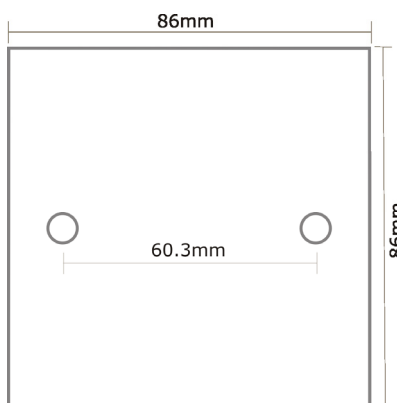
- Range: Beyond module operating limits (of -10°C to +45°C)
- Resolution: 0.03125°C
- Accuracy: +/- 0.5°C over module range
- Internal sensor sampling period: ~4 seconds

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

Functional

- PIR state can be interrogated at any time
- 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
- Temperature and RH values can be interrogated at any time
- 10 independent event triggers:
 - PIR state change trigger
 - Temperature equals or exceeds user defined 'High' limit
 - Temperature equals or falls below user defined 'Low' limit
 - Temperature difference exceeds user defined 'Delta' limit (auto-datuming)
 - Temperature time interval trigger (ranges: 1-127 seconds/1-127 minutes)
 - RH equals or exceeds user defined 'High' limit
 - RH equals or falls below user defined 'Low' limit
 - RH difference exceeds user defined 'Delta' limit (auto-datuming)
 - RH Time interval trigger (ranges: 1-127 seconds/1-127 minutes)
 - Module Initialise trigger
- User defined trigger enabling pattern
- Each event trigger can generate a pre-defined response and/or several user programmable responses.
- Status/PIR indicator LED
- In-situ reprogrammable firmware



Electrical

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

Environmental

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

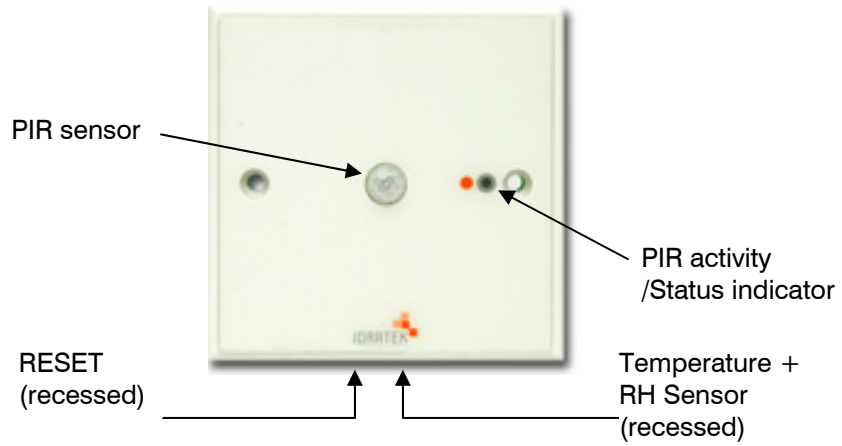


Mechanical

- Designed to fit UK standard 35mm deep electrical patch panel
- 60.3mm fixing centres using standard M3.5 screws

¹ Manufacturers Data Sheet

Interfaces (front)



Interfaces (rear)

