

FEATURES

- USB Powered
- Ambient Temperature & Humidity
- Pt100 Probe (-200C to +200C)
- Magnetic Door Sensor
- Expansion Probe Port
- ZigBee Pro



DESCRIPTION

The IH-302 sensor hub monitors ambient temperature and humidity along with external door sensor and freezer temperature probes. It works with IntelliSockets™ to form a secure wireless mesh network for control and reporting of data. Each network is anchored by an IntelliGateway™ base station providing connectivity to our WattIQ Cloud data collection and analysis service.

PERFORMANCE

| Parameter | Symbol | Min | Typ | Max | Units |
|--------------------------|--------|-----------------|-----|--------|--------|
| Input Current (5V) | | | 40 | | mA |
| Resolution (Temperature) | | | | 0.1 | C |
| Resolution (Humidity) | | | | 0.1 | % |
| Pt100 Range | | -200 | | +200 | C |
| Door Sensor Range | | | 25 | | mm |
| Reporting Interval | | 4 | 15 | 60 | s |
| RF Range | | | 50 | | m |
| RF Transmit Power | | | 12 | | dBm |
| ZigBee Channels | | 11 | | 26* | |
| ZigBee Hive | | 0x3000 | | 0x3FFF | |
| Size | | 4.5 x 3.3 x 1.5 | | | inches |

* Channel 26 limited to 0dBm

COMPLIANCE

| Agency | File |
|-------------------------|----------|
| ZigBee Profile (Plover) | 0x114B |
| FCC | 2AECN312 |

ENVIRONMENTAL

| Parameter | Symbol | Min | Typ | Max | Units |
|-----------------------|----------------|-----|-----|-----|-------|
| Operating Temperature | T _O | 0 | 25 | 40 | C |
| Storage Temperature | T _S | -40 | | 100 | C |
| Relative Humidity | RH | 0 | | 95 | % |

* For indoor use only.

PUSHBUTTON / LED

| Action | Result |
|---------------------------|---|
| Press and hold 3+ seconds | Soft reset. Re-start socket. Similar to plugging in. |
| Press and hold 8+ seconds | Hard reset. All conditions are set to default. Normally this sets unit back to FACTORY channel and hive. However, if unit has been deployed on CUSTOMER channel and hive, a hard reset will then toggle between FACTORY and CUSTOMER settings. This is a useful feature to correct a unit that has been accidentally reset to FACTORY. It also provides a quick method to perform a manual self-heal. If on FACTORY, LED will be red, CUSTOMER green. |

| Color | Meaning |
|-----------------------|--|
| Black | Unit has no power. |
| Yellow | Boot-up sequence in effect. Typically ½ second duration. |
| Flashing Red or Green | Unit is attempting to join mesh network. |
| Red | Door is open. |
| Green | Door is closed. |

FCC

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

To satisfy RF exposure requirements, this device and its antenna must operate with a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.