



## Sense<sup>IoT</sup> Condition – Distance

The Sense Condition – Distance harnesses the power and versatility of LoRaWAN and combines it with a robust and accurate laser range finder to create a highly effective 'state change' alerting IoT device. The device is easily configurable to communicate at different intervals depending on the use case and is very energy efficient on the powerful battery, ensuring a long life.

### Applications

The Sense Condition – Distance is designed for state change alerting for a variety of different applications such as:

- ▶ Facilities management
- ▶ Production line material flow
- ▶ Consumable replenishment
- ▶ Room utilisation
- ▶ Space/asset utilisation
- ▶ Bin/tank fill level monitoring
- ▶ Container management
- ▶ Field operations
- ▶ Ports construction & mining
- ▶ Asset management
- ▶ Worker accountability
- ▶ Fleet monitoring
- ▶ Yard management

The device is designed to work in conjunction with local LoRa networks and has been deployed and tested with MultiTech Gateways. It is a class A end node with two different configurable beaconing schemes allowing the user to set the product to alarm on distance change (Temperature and Accelerometer sensors can be added as an optional extra).

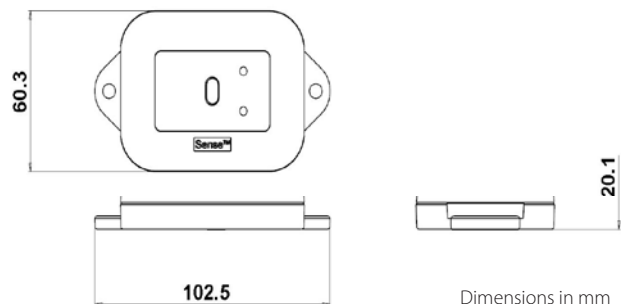
### Physical Specifications

|              |                            |
|--------------|----------------------------|
| Construction | 2-part durable PC/ABS case |
| Size (mm)    | 102.5 × 60.3 × 20.1        |
| Size (in)    | 4.03 × 2.37 × 0.79         |
| Weight (g)   | 80                         |
| Attachment   | Mechanical (std)           |

### Operational Specifications

|                     |                                                            |
|---------------------|------------------------------------------------------------|
| Radio Protocol      | LoRaWAN, NFC (Beacon configured via NFC)                   |
| Supported Profiles  | 868 MHz – Europe<br>915 MHz – USA                          |
| Battery Type        | Sealed prismatic battery, non-replacable                   |
| Battery Capacity    | 3.85 Ah                                                    |
| Battery Life        | 5 years+ at 15 minute range reading intervals              |
| Read Range          | 3–4 km urban — can be up to 15 km line of sight            |
| Default Beacon Rate | Configurable from 1–254 hours                              |
| Sensor Period       | Configurable from 0–254 minutes (where 0 is off)           |
| Sensors             | Laser Range Finder<br>Optional: Temperature, Accelerometer |
| Laser Range         | 1–200 cm                                                   |
| Laser Tolerance     | ± 2 cm                                                     |
| Visual Indicator    | LED                                                        |

### Dimensions



# Sense<sup>IoT</sup>

Intelligent, powerful IoT devices

## Powerful Features

- ▶ Powerful, energy efficient, accurate LoRaWan 'state change' alerting device
- ▶ 3-4 km urban read range — up to 15 km line of sight
- ▶ Deployment as LoRaWAN or standalone private network



## Environmental Specifications

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -20°C to +60°C |
| Shock & Vibration     | MIL-STD-810 F  |

## Related System Components

|                                |                                                         |
|--------------------------------|---------------------------------------------------------|
| LoRa Technology Evaluation Kit | Including LoRa devices, user guide and MultiTech reader |
|--------------------------------|---------------------------------------------------------|

## Configurable Parameters

|                                |                            |
|--------------------------------|----------------------------|
| Default Beacon Rate (in hours) | Sensor Period (in minutes) |
|--------------------------------|----------------------------|

## Ordering Information

|             |                                               |
|-------------|-----------------------------------------------|
| Part Number | CP13773 (EU version)<br>CP14156 (USA version) |
| Warranty    | 1 year                                        |

## Certifications:



## Meeting Your Requirements

Our Sense range of IoT devices has been designed with a wide range of use cases in mind. However, we realise that your exact requirements may not be met by an 'off the shelf' product and a combination of the many features in the Sense range could be required. Our engineers and technical teams like nothing more than to solve specific tracking and communication challenges (it's what gets them out of bed in the morning) and we would be happy to consider a bespoke version of 'Sense' tailored to your particular scenario. **Contact us at [sales@omni-id.com](mailto:sales@omni-id.com) to find out more.**



Omni-ID office locations: US | UK | China | India

For product or technology inquiries email: [sales@omni-id.com](mailto:sales@omni-id.com)

