Sense IoT

Intelligent, powerful IoT devices

Visit www.omni-id.com/sense to learn more

Sense IoT Range

Products	Sense Locate – Kinetic	Sense Locate – Position	Sense Condition – Alert	Sense Condition – Distance	Sense Condition – Temperature
Typical Applications	Hospitals, Manufacturing facilities, Warehouse management, Cold chain condition monitoring, Container management, Facilities management, Ports construction & mining, Asset management	Cold chain condition monitoring, Container management, Facilities management, Ports construction & mining, Field operations, Asset management, Worker accountability, Fleet monitoring, Yard management	Facilities management, Production line material flow, Consumable replenishment, Room utilisation, State change notification, Space/asset utilisation, Field operations, Ports construction & mining, Emergency detection, Asset management, Worker accountability, Fleet monitoring, Yard management	Facilities management, Production line material flow, Consumable replenishment, Room utilisation, State change notification, Space/asset utilisation, Field operations, Ports construction & mining, Emergency detection, Asset management, Worker accountability, Fleet monitoring, Yard management	Efficient operation, Equipment monitoring in-house or in transit, Data Centers and metal IT assets – both in terms of tracking and temperature monitoring, Embedding the tag into metal components, Monitoring mechanical plants
Operarional Specifications					
Radio Protocol	Bluetooth 4.2 (2.45GHz) +8dBm to –15dBm NFC (Beacon configured via NFC)	LoRaWAN NFC (Beacon configured via NFC)	LoRaWAN NFC (Beacon configured via NFC)	LoRaWAN NFC (Beacon configured via NFC)	EPC Class 1 Gen2v2
Frequency Range LoRa	N/A	868MHz (EU) | 915MHz (US)	868MHz (EU) | 915MHz (US)	868MHz (EU) | 915MHz (US)	866-868 (EU) | 902-928 (US)
Battery Type	Sealed Prismatic battery, non-replaceable	Sealed Prismatic battery, non-replaceable	Sealed Prismatic battery, non-replaceable	Sealed Prismatic battery, non-replaceable	N/A
Battery Capacity	1.5Ah	4.8Ah	3.85Ah	3.85Ah	N/A
Battery Life	5 years, 5% motion, 10 second beacon rate	5 years, 2,000 movements	5 years+, 25,000 activations	5 years+ at 15 Minute range reading interval	N/A
Read Range	200 m+ depending on reading device	Range 3–4 km urban — can be up to 15 km line of sight	Range 3–4 km urban — can be up to 15 km line of sight	Range 3–4 km urban — can be up to 15 km line of sight	Fixed reader: Up to 4 m (13.1 ft)[1] Handheld reader: Up to 2 m (6.6 ft)[1]
Default Beacon Rate	Configurable from 1–10 seconds	Configurable from 1–254 hours	Configurable from 1–254 hours	Configurable from 1–254 hours	N/A
Alarm Beacon Rate	Configurable from 0–10 seconds (where 0 is off)	Configurable from 1–254 minutes (where 0 is off)	Configurable from 1–254 minutes (where 0 is off)	Configurable from 1–254 minutes (where 0 is off)	N/A
Sensors	Accelerometer, Temperature	GPS (Location) Accelerometer (Movement) Temperature (Measurement)	Push Button (Alert) Optional: Temperature, Accelerometer	Laser Range Finder Optional: Temperature, Accelerometer	Temperature
LED Indicator	Yes	Yes	Yes	Yes	No
Temperature Sensor Range	–20°C to +60°C with an accuracy of +/–2°C	–20°C to +60°C with an accuracy of +/–2°C	N/A	N/A	
Configurable	Tag Type (GATT Profile) Alarm Beacon Rate Default Beacon Rate Temp. Threshold Acc. Threshold	Alarm Beacon Rate Default Beacon Rate Temp. Threshold Acc. Threshold *GNSS Min. Lock Time *GNSS Max. Lock Time *GNSS DOP Threshold	Alarm Beacon Rate Default Beacon Rate Sensor Period (Minutes) Optional Temp	Alarm Beacon Rate Default Beacon Rate Sensor Period (Minutes)	N/A
Supported Profiles	Open, iBeacon, Eddystone UUID	N/A	N/A	N/A	N/A

1. Excludes adhesive options, consult adhesive datasheet for recommended temperature ratings.

Values for Comparison only, please refer to Product Datasheets for full specifications.

Sense IoT

Intelligent, powerful IoT devices

Visit www.omni-id.com/sense to learn more

Sense IoT Range *(continued)*

Products

Bluetooth®

Sense Locate – Kinetic

LoRaWAN™

Sense Locate – Position

LoRaWAN™

Sense Condition – Alert

LoRaWAN™

Sense Condition – Distance

RFID

Sense Condition – Temperature

Physical and Environmental Specifications	Sense Locate – Kinetic	Sense Locate – Position	Sense Condition – Alert	Sense Condition – Distance	Sense Condition – Temperature
Construction	Overmolded durable, shock resistant TPE (Thermoplastic elastomer)	Overmolded durable, shock resistant TPE (Thermoplastic elastomer)	2-part durable PC/ABS Case	2-part durable PC/ABS Case	Painted black Optimized for metal
Size (mm)	95.1 × 34.2 × 21	113.4 × 58.3 x 24.3	80.3 × 60.3 × 21.3	102.5 × 60.3 × 20.1	13.1 x 8.05 x3.1 including IC bump Tolerance +/–0.5
Weight (g)	59	134	77	80	1.4
Attachment	Mechanical (std) Film Adhesive (optional)	Mechanical (std) Film Adhesive (optional)	Film Adhesive	Mechanical (std) Film Adhesive (optional)	Film adhesive (included) for placement only in applications exceeding +85°C[2]
Operating Temperature	–20°C to +60°C	–20°C to +60°C	–20°C to +60°C	–20°C to +60°C	–40°C to +85°C[1]
High-temperature Alarm	N/A	N/A	N/A	N/A	Up to +125°C[1]
Max Temperature Exposure[1]	N/A	N/A	N/A	N/A	220°C short term 168 hrs 150°C long term 700 hrs
IP Rating	IP68	IP68	IP68	IP68	Magnus S3: M3D / M3E
Shock and Vibration	MIL-STD-810-F	MIL-STD-810-F	MIL-STD-810-F	MIL-STD-810-F	MIL-STD-810-G
IC Type (chip)	N/A	N/A	N/A	N/A	Magnus S3: M3D / M3E
Warranty	1 year	1 year	1 year	1 year	1 year
Certifications	CC, FCC, ROHS, WEEE, NFC, BLE	CC, FCC, ROHS, WEEE, NFC, LoRa	CC, FCC, ROHS, WEEE, NFC, LoRa	CC, FCC, ROHS, WEEE, NFC, LoRa	CE , ROHS, ATEX Certified (Optional) C1D1/D2 Certified (optional)

1. Excludes adhesive options, consult adhesive datasheet for recommended temperature ratings. 2. The product has been designed for optimal RF performance when used with 130 micron +/-20% adhesive under the tag.

Values for Comparison only, please refer to Product Datasheets for full specifications.