

Sense^{IoT} Range – Intelligent, Powerful IoT Devices



| Product Name | Sense ^{IoT} Asset | Sense ^{IoT} Asset XL | Sense ^{IoT} Condition (with Alert Button) | Sense ^{IoT} Condition (with Laser Range Finder) | Sense ^{IoT} Fit 400 | |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 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 | |
| Operational 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) 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 (Movement) Temperature (Measurement) | Laser Range Finder Optional: Temperature, Accelerometer (Movement) Temperature (Measurement) | 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 | | |

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

Continues overleaf

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

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Sense^{IoT} Range – Intelligent, Powerful IoT Devices

Omni-ID[®]
Intelligent Tracking & Monitoring Devices



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|---------------------------------------------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 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 |
| 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 × 24.3 | 80.3 × 60.3 × 21.3 | 102.5 × 60.3 × 20.1 | 131 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 | | -40°C to +85°C ¹ |
| High-temperature Alarm | N/A | N/A | N/A | N/A | Up to +125°C ¹ |
| Max Temperature Exposure¹ | 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) CIDI/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.

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