



Product Name

Sense^{IoT} Fit 400

Sense^{IoT} Asset

Sense^{IoT} Asset

Sense^{IoT} Asset XL

Sense^{IoT} Lite

Typical Applications

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

Hospitals, manufacturing facilities, warehouse management, cold chain condition monitoring, container management, facilities management, ports construction & mining, asset management

Hospitals, manufacturing facilities, warehouse management, container management, facilities management, ports construction and mining, asset management, yard management

Container management, facilities management, ports construction & mining, field operations, asset management, worker accountability, fleet monitoring, yard management

Asset tracking, personnel tracking, real time location

Radio Protocol

EPC Class 1 Gen2v2

Bluetooth 4.2 (2.45GHz) +8dBm to -15dBm NFC (Beacon configured via NFC)

Bluetooth 5.0 (QUUPPA proprietary channels or BLE advertising channels), +6dBm to -24dBm

LoRaWAN NFC (beacon configured via NFC)

Bluetooth 5.0 (Quuppa proprietary channels and BLE advertising channels), +6dBm to -24dBm

Frequency Range

866-868 (EU) | 902-928 (US)

2.4GHz

2.4GHz

868MHz (EU) | 915MHz (US)

2.4GHz

Battery Type

N/A

Sealed Prismatic battery, non-replaceable

Sealed prismatic battery, non-replaceable

Sealed Prismatic battery, non-replaceable

Replaceable CR2032

Battery Capacity

N/A

1.2Ah

1.2Ah

3.2Ah

225mAh

Battery Life

N/A

Up to 5 years, 5% motion, 10 second beacon rate Tx power set to +8dBm

Up to 5 years, Device moving 10 hours/day (1Hz beacon rate) Device stationary 14 hours/day (0.1Hz beacon rate). TX power set to 0dBm

Up to 3 years, DBR set to 24h, 1 movement per day, DOP = 3 (GPS accuracy 7meters)

1 year under following conditions - (device moving 10 hours/day (1Hz beacon rate), device stationary 14 hours/day (0.1Hz beacon rate), Tx power set to 0dBm

Read Range

Fixed reader: Up to 3.5m
Handheld reader: Up to 2 m (6.6 ft)

200 m+ depending on reading device

Up to 200m+ depending On Quuppa locator type used

Range 3–4 km urban — can be up to 15 km line of sight

Up to 200m+ depending on Quuppa locator type

Default Beacon Rate

N/A

Configurable from 1–10 seconds

Configurable

Configurable from 1–254 hours

Configurable

Alarm Beacon Rate

N/A

Configurable from 0–10 seconds (where 0 is off)

N/A

Configurable from 0–254 minutes (where 0 is off)

N/A

Sensor Period

N/A

N/A

N/A

N/A

N/A

Sensors

Temperature

Accelerometer, temperature

Accelerometer (movement), button, LED

GPS (Location) accelerometer temperature

Button, accelerometer

LED Indicator

No

Yes (Bi color LED)

Yes (Bi color LED)

Yes (Bi color LED)

Yes (Bi color LED)

Temperature Sensor Range

-40°C to +85°C

-20°C to +60°C with an accuracy of +/-2°C

N/A

-20°C to +60°C with an accuracy of +/-2°C

N/A

Note: All above Values are for comparison only, Please refer to product datasheets for full specifications.

Continues overleaf

Visit www.omni-id.com to learn more about the complete range of Omni-ID IoT and RFID products

Please refer to product datasheets for full specifications.

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



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Configurable	N/A	Tx power, tag type (GATT Profile), accelerometer threshold, default beacon rate, alarm beacon rate, high temp threshold, low temp threshold, sleep/awake status	Tx power, accelerometer threshold (rate & sensitivity), default beacon rate (transmit rate), Rx rate, buzzer volume	Data rate, accelerometer threshold, default beacon rate, alarm beacon rate, high temperature threshold, low temperature threshold, gnss max lock time, gnss min lock time, dop threshold, tag status (asleep/awake)	Tx power, accelerometer threshold (rate & sensitivity), default beacon rate (transmit rate), Rx rate
Supported Profiles	N/A	BLE (Generic, iBeacon, Eddystone UUID)	Quoppa	N/A	Quoppa
Construction	Painted black, optimized for metal	Overmolded durable, shock resistant TPE (thermoplastic elastomer)	Overmolded durable, shock resistant TPE (thermoplastic elastomer)	Overmolded durable, shock resistant TPE (thermoplastic elastomer)	2-part durable PC/ABS case. Available in Wrist strap, Belt Clip, Lanyard, adhesive or rivet attachment options
Size (mm)	13.1 x 8.05 x 3.1 including IC bump Tolerance +/-0.5	95.1 x 34.2 x 21	95.1 x 34.2 x 21	113.4 x 58.3 x 24.3	Wrist 35 dia x 116, rivet 35 dia x 68.4, without Mechanical Flange 44.4 x 20 x 14.2, cable Tie 74.4 x 24 x 14.2, lanyard 35 dia x 14.2
Weight (g)	1.4	59	59	134	
Attachment	Film adhesive (included) for placement only in applications exceeding +85°C2	Mechanical (std), cable tie attachment accessory (optional), magnet attachment (optional), without mechanical flange (optional)	Mechanical (std), cable tie attachment accessory (opt.), magnet attachment (opt.), without mechanical flange (optional)	Mechanical (std), cable tie attachment accessory (optional), magnet attachment (optional), without mechanical flange (optional)	Rivet, cable tie, lanyard, wrist strap, without mechanical flange
Operating Temperature	-40°C to +85°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C	-20°C to +60°C
Temperature Alarm	Up to +125°C	N/A	N/A	Yes	N/A
Max Temperature Exposure¹	220°C short term 168 hrs 150°C long term 700 hrs	+60°C	+60°C	+60°C	+60°C
IP Rating	IP68	IP68	IP68	IP68	IP68
Shock and Vibration	MIL-STD-810-G	MIL-STD-810-G	MIL-STD-810-G	MIL-STD-810-G	N/A
IC Type (chip)	Magnus S3: M3D / M3E	N/A	N/A	N/A	N/A
Warranty	1 Year	1 Year	1 Year	1 Year	1 Year
Certifications	CE , ROHS, ATEX Certified (Optional) CID1/D2 Certified (optional)	CC, FCC, ROHS, WEEE, NFC, BLE	CC, FCC, ROHS, WEEE, Quoppa	CC, FCC, ROHS, WEEE	CC, FCC, ROHS, WEEE, Quoppa

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