



BATTERY POWERED WIRELESS IoT SOLUTIONS MONITOR PREMISES AND ASSETS 24/7

LRS20LDO LoRaWAN OCCUPANCY SENSOR



Product Features

- Provides a simple and cost-effective solution for detecting the occupancy in a specified area and distance.
- Long Distance Measurement Range: up to 4 meters
- Fast response
- Up to 4.5 years battery lifetime.
- Easy installation without any complex wiring and pricey setup cost.
- Application: Smart Toilet, Office, Warehouse, Supermarket, etc.

Performance Characteristics

Power	1 x 3.6V C Size Lithium Battery
Standby Current	< 25 uA @3.6V
Sensor Emitter	940nm invisible laser (Class 1)
Detectable Distance	Up to 4000mm Accuracy: +/- 20mm*
Typical Full Field of View (FOV)	27 degree
Data Upload Interval	Configurable (min. 180 sec)
Measurement Interval	Configurable (min. 60 sec)
On-device Alert Detection	Yes, exceeds or falls below threshold
Battery Life	Up to 1.4-year at 1.5s measurement, 15 mins data heartbeat Up to 4.5-year at 60s measurement, 10 mins data heartbeat

* Test Condition

- Dark Environment - no IIR light in the band 940nm+/-30nm.
- Reflective Surface - grey (N8.25 Munsell) 54% reflectance and white (N9.5 Munsell) 80% reflectance.

Wireless Characteristics

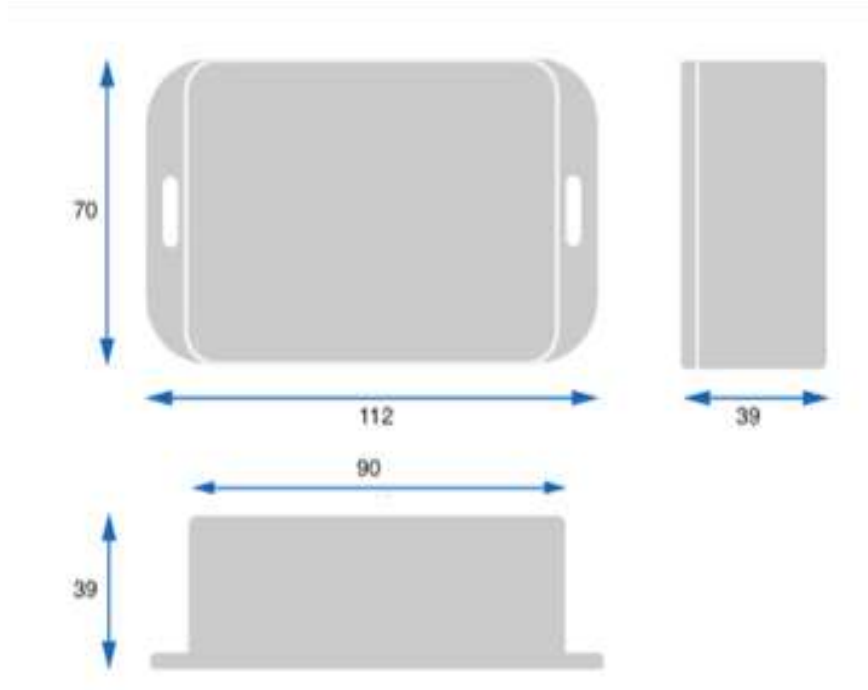
Wireless Connectivity	LoRaWAN® 1.0.3 EU863-870, US902-928, AU915-928, AS923
Transmit Power	EU868, AS923: +16dBm US915, AU915: +20dBm
Sensitivity	Max. -137dBm
Data Transfer Rate	0.3kbps - 50 kbps
LoRaWAN Features	ABP/OTAA, ADR, Class A End-device
Antenna Type	Built-in Antenna
Security	AES-CTR (LoRaWAN End-to-End Encryption) AES-CMAC (Data Integrity Protection)



Physical Characteristics

Dimensions	L 112mm x W 70 mm x H 39 mm
Weight	115g
Operating Temperature	-20 to 70°C
Storage Temperature	-20 to 80°C
Storage Humidity	< 95% RH
Ingress Protection	IP65
Warranty Period	1 Year

Mechanical Dimensions



Ordering Information

SENSO8 LoRaWAN Occupancy Sensor	LRS20LD0-0000-000x
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x = frequency band: 0 - AS923, 1 - EU868, 2 - AU915, 3 - US915