

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

LRS20100 LoRaWAN Ambient Temperature & Humidity Sensor



Product Features

- Provides a simple and cost-effective solution for Ambient Temperature and Humidity monitoring.
- High precision measurements from -20°C to 60°C, 10% to 100% R.H.
- Instant alerts regardless of the data upload interval.
- More than 10 years of battery life.
- Easy installation without any complex wiring and pricey setup cost.
- Application: Cold Room, Refrigerator, Medical laboratory, Hotel, Hospital, Factory.

Performance Characteristics

Power	1 x 3.6V C Size Lithium Battery	
Standby Current	< 25 uA @3.6V	
Temperature	Range	-20 to 60°C
	Accuracy	±0.7°C (-20 to 0°C), ±0.3°C (0 to 60°C)
Humidity	Range	10% to 100% RH
	Accuracy	±4.5% RH (10 to 20%), ±3% RH (20 to 80%), ±4.5% RH (80 to 100%)
Data Upload Interval	Configurable (Default: 10 mins)	
On-device Alert Detection	Yes, exceeds high/low temperature or humidity threshold	
Battery Life	Up to more than 10 years at 60 mins data upload interval Up to 8 years at 10 mins data upload interval	

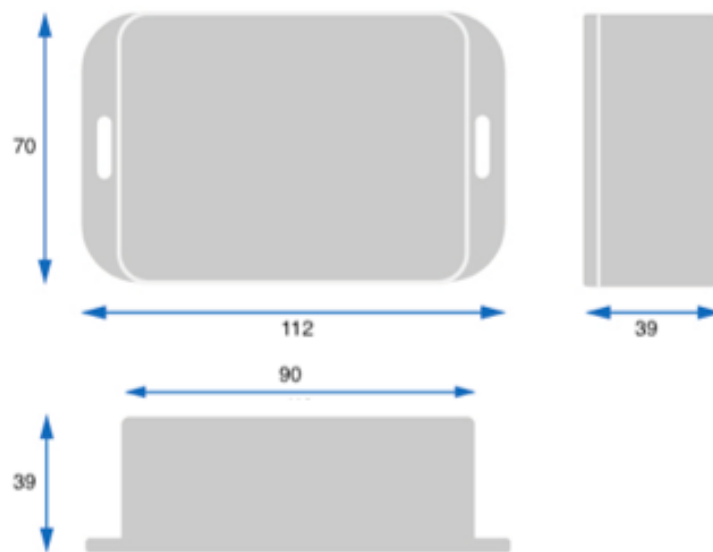
Wireless Characteristics

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
Warranty Period	1 Year

Mechanical Dimensions



Ordering Information

SEN8 LoRaWAN Ambient Temperature & Humidity Sensor	LRS20100-0000-000x
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x = frequency band: 0 - AS923, 1 - EU868, 2 - AU915, 3 - US915