

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

LRS20U00 LoRaWAN Ultrasonic Level Sensor



Product Features

- Provides a simple and cost-effective solution for detecting the level or distance in a specified area.
- Long distance measurement range: up to 5 meters.
- Fast response.
- 5 years battery lifetime.
- Easy installation without any complex wiring and pricey setup cost.
- Application: man-hole, tank level measurement, waste management, sewer system monitoring.

Performance Characteristics

Power	1 x 3.6V C Size Lithium Battery
Standby Current	< 30 uA @3.6V
Sensor Type	Fast response ultrasonic sensor specially for man-hole and tank level measurement
Detectable Distance	30cm to 500cm Accuracy: +/- 1%
Typical Full Field of View (FOV)	About 11 degree
Data Upload Interval	Configurable (Default: 10 mins)
Measurement Interval	Configurable (Default: 2 mins)
On-device Alert Detection	Yes, exceeds or falls below threshold
Battery Life	Up to 5 years*

* Conditions: measurement interval at 2 min, upload data at every 10 min.

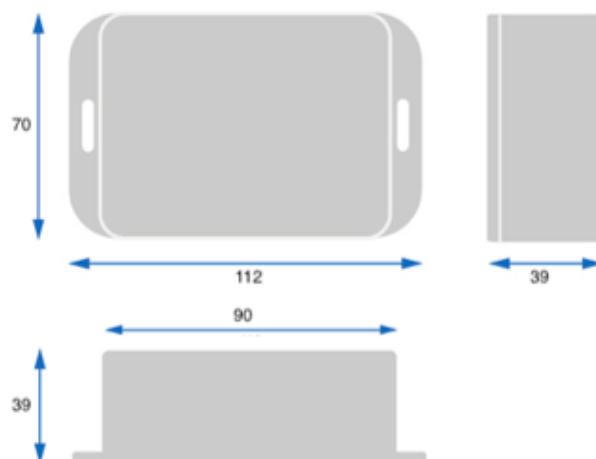
Wireless Characteristics

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 (excluding ultrasonic detector) 250g (including ultrasonic detector)
Operating Temperature	-20 to 60°C
Storage Temperature	-20 to 70°C
Storage Humidity	< 95% RH
Ingress Protection	IP67
Warranty Period	1 Year

Mechanical Dimensions



Ordering Information

SEN8 LoRaWAN Ultrasonic Level Sensor	LRS20U00-0000-000x
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x = frequency band: 0 - AS923, 1 - EU868, 2 - AU915, 3 - US915