

# Spot Leak Detection Sensor Featuring LoRaWAN® EM300-SLD

*Milesight*



EM300-SLD is a compact spot leakage detection sensor for detecting presence of water (or other conducting liquids) and transmitting alarm using LoRaWAN® technology. In addition to LoRaWAN® technology with low power consumption, it has a built-in high-capacity battery available for several years without replacement. Combining with Milesight LoRaWAN® gateway and Milesight Development Platform solution, users can manage all sensor data remotely.

EM300-SLD also integrates temperature and humidity sensors, which has a great use for applications such as pipe leakage monitoring, basement flooding, pump failure, etc.

## ◆ Features

- Detect the presence of liquids by a small water probe and based on the conductive principle
- Embedded with temperature and humidity sensors for environment monitoring
- Ultra-wide-distance transmission up to line of sight of 10km
- IP67 UV-resistant and waterproof enclosure for harsh environment applications
- Built-in 4000 mAh replaceable battery and works for several years without replacement
- Store locally historical records and support retransmission to prevent data loss
- Support Milesight D2D protocol to enable ultra-low latency and direct control without gateways
- Equipped with NFC for easily configuration

- Compliant with standard LoRaWAN<sup>®</sup> gateways and network servers
- Quick and easy management with Milesight IoT Cloud and Milesight Development Platform

## ◆ Specifications

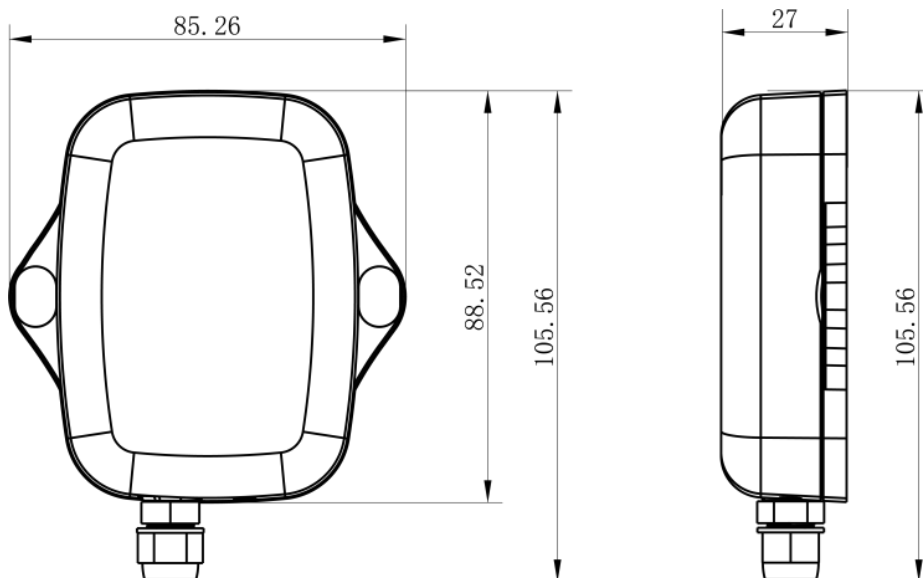
<b>Wireless Transmission</b>	
Technology	LoRaWAN <sup>®</sup> , Milesight D2D
Antenna	Internal Antenna
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16dBm(868 MHz)/20dBm(915 MHz)/19dBm(470 MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A
<b>Measurement</b>	
<b>Leakage Detection</b>	
Liquid Type	Conducting liquid
Trigger Condition	When liquid level reaches 5mm
Cable Length	1.5m (Customizable)
<b>Temperature</b>	
Range	-30°C to + 70°C
Accuracy	0°C to + 70°C (+/- 0.3°C), -30°C to 0°C (+/- 0.6°C)
Resolution	0.1°C
<b>Humidity</b>	
Range	0% to 100% RH
Accuracy	10% to 90% RH (+/- 3%), below 10% and above 90% RH (+/- 5%)
Resolution	0.5% RH
<b>Others</b>	
LED	1 × LED Indicator (Internal)
Button	1 × Power/Reset Button (Internal)
<b>Software</b>	
Power On & Off	NFC, Power Button (Internal)
Configuration	NFC via Mobile App, Downlink
Advanced Feature	Threshold Alarm, Milesight D2D Controller, Data Storage (2, 800 entries), Data Retransmission, Data Retrievability
<b>Physical Characteristics</b>	
Power Supply	1 × 4000 mAh ER18505 Li-SOCL <sub>2</sub> Battery (8000 mAh Version Optional)

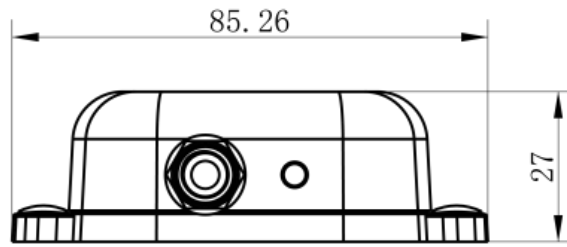
Battery Life* (10 min interval + 24 triggers per day)	Over 10 Years (SF7, EU868 & US915) Around 5.6 Years (SF10, EU868) Around 4.1 Years (SF10, US915)
Operating Temperature	-30°C to +70°C
Relative Humidity	0% to 100% (non-condensing)
Ingress Protection	IP67
Housing & Color	Transceiver: ABS + PC (Flame Retardant), White Sensor Probe: Stainless Steel 316, White & Silver
Dimension	105.6 × 85.3 × 27 mm (4.16 × 3.36 × 1.06 in)
Installation	Transceiver: Wall Screw Mounting, 3M Tape Mounting, Cable-Tie Mounting Sensor Probe: Wall Screw Mounting, 3M Tape Mounting
<b>Approvals</b>	
Regulatory	CE, FCC, ISED, RCM, Telec, ICASA
Environmental	RoHS

\* Tested under laboratory conditions and for guideline purposes only.

## ◆ Dimensions (mm)

### Transceiver:





**Sensor Probe:**

