

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 liquids) and transmitting alarm using LoRaWAN® technology. With this low power consumption technology, EM300-SLD can work up to 5 years with 4000 mAh battery. Combining with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can manage all sensor data remotely and visually and receive alarms via mobile APP.

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 more than 5 years without replacement
- Store locally 3, 000 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[®] gateways and network servers
- Quick and easy management with Milesight IoT Cloud solution

◆ Specifications

Wireless Transmission

| | |
|-------------|---|
| Technology | LoRaWAN [®] , Milesight D2D |
| 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 |

Measurement

Leakage Detection

| | |
|-------------------|-------------------------------|
| Liquid Type | Conducting liquid |
| Trigger Condition | When liquid level reaches 5mm |
| Cable Length | 1.5m (Customizable) |

Temperature

| | |
|------------|---|
| 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 |

Humidity

| | |
|------------|---|
| Range | 0% to 100% RH |
| Accuracy | 10% to 90% RH (+/- 3%), below 10% and above 90% RH (+/- 5%) |
| Resolution | 0.5% RH |

Operation

| | |
|------------------|---|
| Power On & Off | NFC, Power Button (Internal) |
| Configuration | NFC Configuration via Mobile App |
| Advanced Feature | Milesight D2D Controller, Data Storage, Data Retransmission |

Physical Characteristics

| | |
|-----------------------|---|
| Power Supply | 1 × 4000 mAh ER18505 Li-SOCL ₂ Battery (extendable to 2 batteries) |
| Battery Life* | 10 years (10 min interval + 24 triggers per day) |
| Operating Temperature | -30°C to +70°C |
| Relative Humidity | 0% to 100% (non-condensing) |
| Ingress Protection | IP67 |
| Dimension | 105.6 × 85.3 × 27 mm (4.16 × 3.36 × 1.06 in) |
| Installation | Wall Mounting |

| Approvals | |
|---------------|---------|
| Regulatory | CE, FCC |
| Environmental | RoHS |

* Tested under laboratory conditions and for guideline purposes only.

