EM300-SLD

Spot Leak Detection Sensor

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 5 years without replacement

➢ 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®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)
Sensitivity	-147dBm @300bps
Mode	OTAA/ABP Class A

Measurement

Leakage Detection

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	Mobile APP(via NFC) or PC software (via USB Type-C)

Physical Characteristics

Power Supply	1 × 4000 mAh ER18505 Li-SOCL$_2$ battery (extendable to 2 batteries)
Battery Life*	>5 years (10 min interval and alarm once every day, SF10)
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

* Tested under laboratory conditions and for guideline purposes only.

Milesight

LoRaWAN® Sensor/Controller
LoRaWAN® Gateway
Industrial 4G/5G Router

LoRaWAN CERTIFIED   **5G · AIoT**

Industrial Cellular Router	LoRaWAN® Sensor	LoRaWAN® Gateway	Compact Controller	LoRaWAN® Controller	Solenoid Valve Controller
UR75 UR3x	AM100 EM300 EM500	UG65 UG67	UC34xx/UC11xx	UC501	UC511

Picture	Model	Measuring Range	Descriptions
	EM300-TH-915M	**Temperature** -30°C ~ 70°C **Humidity** 0% ~ 100% RH	**Temperature & Humidity Sensor** 1 * 4000 mAh Li-SOCL2 battery (8000 mAh optional) NFC enabled IP67 rated
	EM300-MCS-915M	**Detection Distance** 20 ~ 30mm **Temperature** -30°C ~ 70°C **Humidity** 0% ~ 100% RH	**Magnetic Contact Switch** 1 * 4000 mAh Li-SOCL2 battery (8000 mAh optional) NFC enabled IP67 rated
	EM300-SLD-915M	**Trigger Condition** when water level reaches 5mm **Temperature** -30°C ~ 70°C **Humidity** 0% ~ 100% RH	**Spot Leak Detection Sensor** 1 * 4000 mAh Li-SOCL2 battery (8000 mAh optional) NFC enabled IP67 rated
	EM300-ZLD-915M	**Trigger Condition** when water level reaches 5mm **Temperature** -30°C ~ 70°C **Humidity** 0% ~ 100% RH	**Zone Leak Detection Sensor** 1 * 4000 mAh Li-SOCL2 battery (8000 mAh optional) NFC enabled IP67 rated

Remark:
"-915M", "-868M", "-470M" in the model refers to different LoRaWAN Frequency in option for different countries/regions, (e.g.)
"-915M": KR920/AS923/AU915/US915
"-868M": RU864/IN865/EU868
"-470M": CN470