Membrane Leakage Detection Sensor
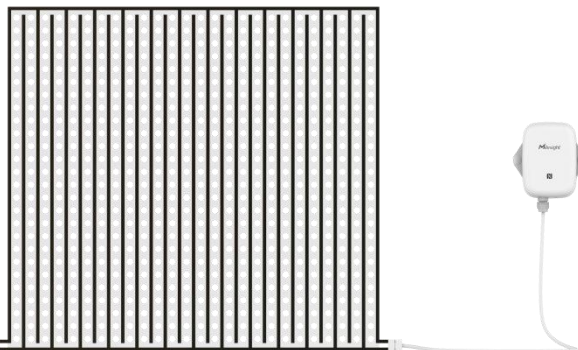
Featuring LoRaWAN®

EM300-MLD

The EM300-MLD is an innovative leak sensor that incorporates a flexible printed membrane. This design enables precise detection and customized coverage in a compact form factor, making it suitable for various applications. With a single embedded battery, EM300-MLD offers a long operational life of up to 10 years, extendable to two batteries if desired. Its high IP67 protection and durable construction ensure reliability and adaptability in harsh environments.

With easy configuration and wireless detection, the EM300-MLD facilitates simple deployment and connectivity. Compliant with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can monitor the leakage and receive alarms easily via webpage or mobile App remotely.

◆ Features

- ➢ Detect the presence of liquids by a flexible printed membrane for covering a larger area
- ➢ Equip with high-quality printed membrane that can be reused and customized
- ➢ Adopt green material with 100% reusability and cause no dangerous emissions
- ➢ IP67 waterproof and UV-resistant enclosure for harsh environment applications
- ➢ Built-in 4000 mAh replaceable battery and work up to 10 years without replacement
- ➢ Store locally 1000 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 easy 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
Leakage Detection	
Liquid Type	Conductive Liquid (Water, Weak Acid, Weak Base, etc.)
Trigger Media	400 × 400 × 0.25 mm Printed Leakage-Detecting Film (The size can be customizable)
Trigger Condition	Soaking Liquid Length > 1.5 cm
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	
Cable Length	1000 mm (Customizable)
Power Supply	1 × 4000 mAh ER18505 Li-SOCL$_2$ Battery (Extendable to 2 Batteries)
Battery Life*	Up to 10 Years (One hour Leakage per Day, 25°C)
Operating Temperature	-30°C~70°C
Relative Humidity	0% to 95% (non-condensing)
Color & Material	White Flame, ABS + PC (Retardant)
Ingress Protection	IP67
Dimension	105.6 × 85.3 × 27 mm (4.16 × 3.36 × 1.06 in)
Installation	Wall Screw Mounting, 3M Tape Mounting, Cable-Tie Mounting

* Tested under laboratory conditions and for guideline purposes only.

Milesight | www.milesight.com

Tel 86-592-5085280
Sales email: iot.sales@milesight.com
Address: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China

Support email: iot.support@milesight.com
Website: www.milesight.com