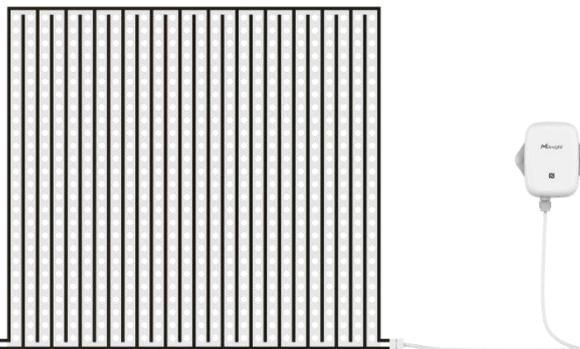


Membrane Leakage Detection Sensor

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.