

Spot Leak Detection Sensor

Featuring LoRaWAN®

MS700-SLD

MoviSight



MS700-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, MS700-SLD can work up to 5 years with 4000 mAh battery. Combining with MoviSight LoRaWAN® gateway and MoviSight IoT Cloud solution, users can manage all sensor data remotely and visually and receive alarms via mobile APP.

MS700-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 MoviSight 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 | -137dBm @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 | NFC Configuration via Mobile App |
| 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 |

* Tested under laboratory conditions and for guideline purposes only.