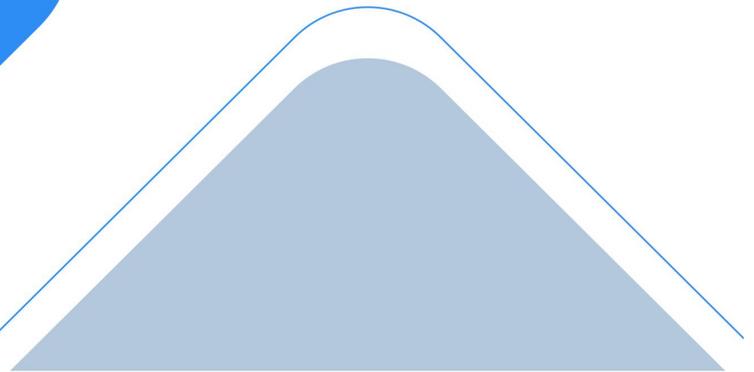


# EM500-SWL

Submersible Level Sensor



EM500-SWL is designed for measuring liquid level in harsh environments and transmitting data using LoRaWAN® technology. With this low power consumption technology, EM500-SWL can work up to 10 years with 19000 mAh battery. Combining with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can manage all sensor data remotely and visually. EM500-SWL is widely used for applications like tank level monitoring, river level monitoring, etc.

## ◆ Features

- Stainless probe with corrosion resistance
- Ultra-wide-distance transmission up to line of sight of 10km
- IP66 waterproof enclosure for harsh environment applications
- Built-in 19000 mAh replaceable battery and work for 10 years without replacement
- Equipped with NFC for easy configuration
- Compliant with standard LoRaWAN® gateways and network servers
- Quick and easy management with Milesight IoT Cloud solution

## ◆ Applications

- Water tank level monitoring
- Water resource level monitoring
- ISO tank level monitoring
- Waste water tank monitoring
- Oil store tank level monitoring

## ◆ 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	
Pressure Type	Gauge Pressure
Range	0 ~ 3m/5m/10m (H <sub>2</sub> O) (Customizable up to 200m and for other liquids)
Accuracy	± 0.5% FS
Resolution	0.01m
Operation	
Power On & Off	NFC, power button (Internal)
Configuration	Mobile APP(via NFC) or PC software(via USB Type-C)
Physical Characteristics	
Cable Length	At least 1-1.5m longer than measuring range
Power Supply	19000 mAh Li-SOCL <sub>2</sub> battery (ER34615)
Battery Life*	4 years (10 min interval, SF12) >10 years (10 min interval, SF7)
Operating Temperature	-30°C to +70°C (Transceiver)/-10°C to +60°C (Level Sensor)
Relative Humidity	0% to 100% (non-condensing)
Ingress Protection	IP66
Dimension	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in) Level Sensor: 122 × φ26 mm (4.8 × φ1.0 in)
Installation	Pole, wall or DIN Rail Mounting

\* Tested under laboratory conditions and for guideline purposes only.

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