

EM500 series

Environment Monitoring Sensors



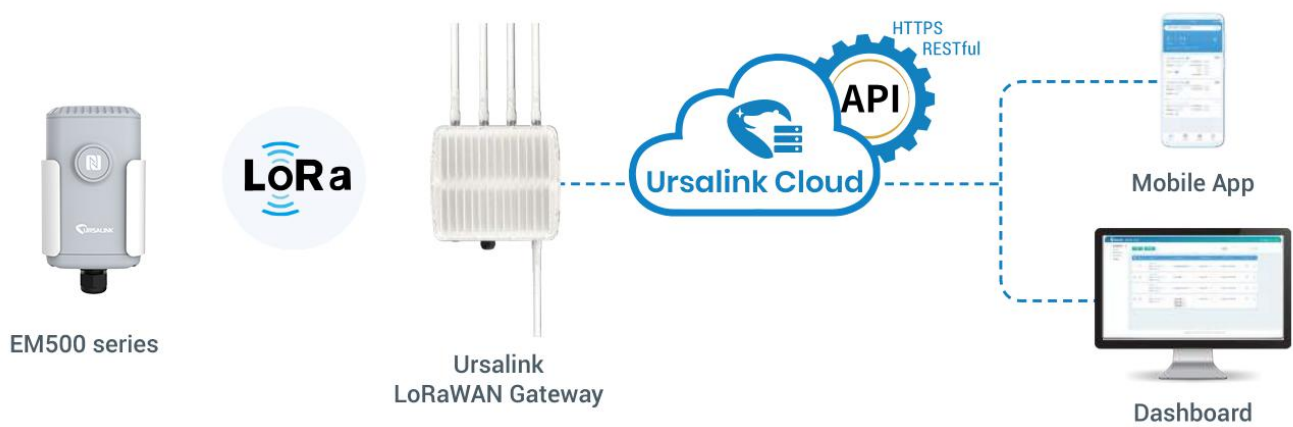
► Introduction

The EM500 series is LoRaWAN sensors designed for different professional applications. These sensors utilize a high ingress protection rating enclosure for use in the most challenging outdoor environmental conditions, and are powered by built-in battery for years of use.

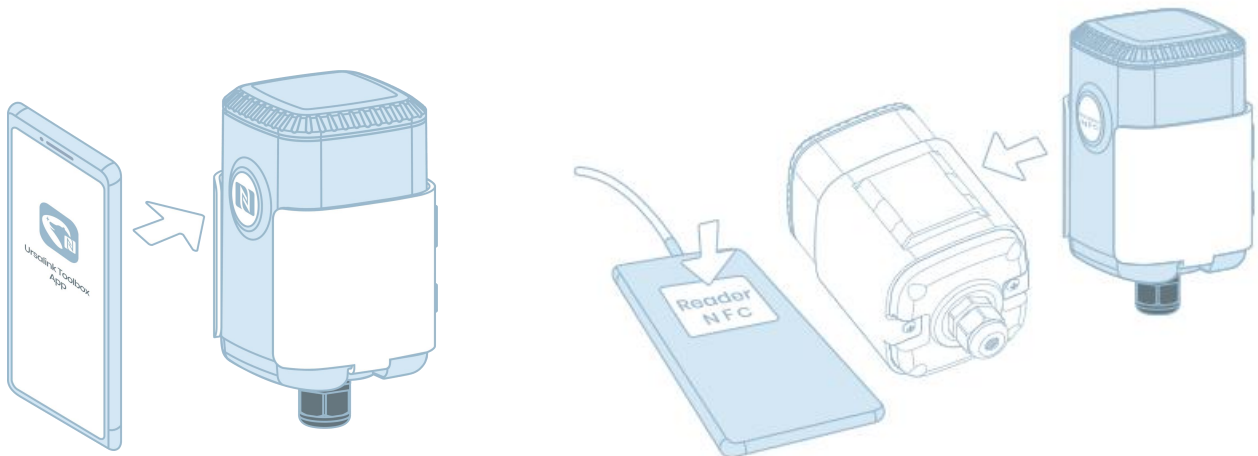
► Features

- Robust LoRa Connectivity for professional applications
- Easy Configuration via NFC
- IP66~68 rating waterproof
- LoRaWAN v1.0/v1.0.2
- Ursalink Cloud compliant
- 19000mAh Replaceable Battery

► Application Example



► Configuration via NFC



Mode 1: Mobile APP Configuration

Mode 2: Computer Configuration

► Hardware Specifications

➤ EM500-UDL Ultrasonic Distance/Level Sensor



Application

- ✓ Water level monitoring in running water
- ✓ Flood Monitoring
- ✓ Level/depth monitoring in water/oil tanks
- ✓ Waste water management
- ✓ Smart agriculture: fill level monitoring in grain, fertilizer or pellets silos
- ✓ Irrigation pond monitoring

LoRaWAN

Frequency	EU433/CN470/IN865/EU868/RU864/US915/AU915/KR920/AS923
Tx Power	20dBm
Sensitivity	-147dBm @300bps
Mode	OTAA/ABP Class A

Distance Measurement

Range	EM500-UDL-W050: 0.3-5m EM500-UDL-W100: 0.5-10m (Customizable for snow level detection)
Resolution	1 mm
Accuracy	±1%

Physical Characteristics

Power Supply	19000 mAh Li-SOCL ₂ battery
Operating Temperature	-20°C to +70°C
Ingress Protection	IP67
Dimension	156.1 × 71 × 69.5 mm
Mounting	DIN rail, wall