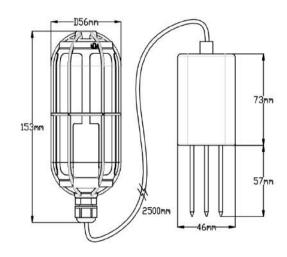


An Industrial Wireless Sensor Network Solution

LoRaWAN Soil Moisture and Temperature Sensor



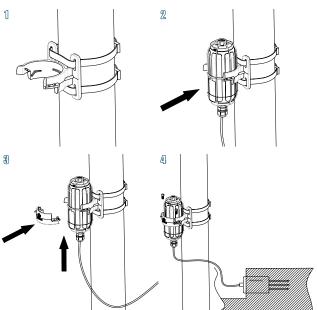


Specifications

Soil Temperature	
Range	-30 °C to +70 °C
Accuracy	±0.2 ℃
Resolution	0.01 °C
Soil Moisture	
Range	From completely dry to fully saturated (from 0% to 100% of saturation)
Accuracy	±2% (0 to 50 %(m³/m³))
Resolution	0.01 %(m³/m³)
General Parameters	
Product Model	LoRa-S-470/868/915-Soil MT-01
Microcontroller	Ultra-low-power MCU
Support Protocol	Based on LoRaWAN v1.0.2 protocol
LoRa Channel Plan	CN470 / EU868 / US915
LoRa Power Output	16 dBm (EIRP)
Sensitivity	470MHz: -140dBm(SF12, BW125KHz) 868MHz: -137.5dBm(SF12, BW125KHz) 915MHz: -136.5dBm(SF12, BW125KHz)
Current Consumption	5 μA (sleep mode) 120 mA (active mode)
Communication Distance	2 to 10 km (depending on different antennas and environments)
Measuring Area	A cylinder area (with the probe as the center, diameter: 7cm, height: 7cm)
Battery Life	≥ 3 year (upload data once per hour)
Battery Voltage	3.6V
Battery Capacity	19Ah (Non-rechargeable)
IP Rating	IP66
UV Resistance	anti-aging (from rain/sun exposure): UL746C F1
Enclosure Material	PC
Operating Temperature	-30 °C to +70 °C
Operating Humidity	0 to 100 %RH (non-condensing)
Device Weight	415g

Installation

Please refer to the user manual for more details.



Certification

