

Intellia Soil Moisture Temperature & electrical Conductivity Sensor

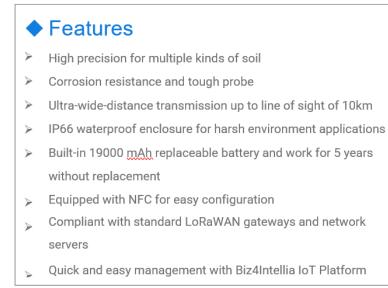
<u>INT-S-01</u>



Introduction:

Intellia Soil Conductivity sensor is designed for measuring soil moisture, temperature, and electrical conductivity in harsh environments and transmitting data using LoRaWAN[®] technology. With this low power consumption technology, INT-S-01 can work up to 5years with 19000 mAh battery. Combining with Biz4Intellia LoRaWAN gateway and Intellia IoT Platform, users can manage all sensor data remotely and visually.

INT-S-01 is widely used for outdoor applications like smart agriculture, smart horticulture, etc.



Applications

- Irrigation Control
- Greenhouse control
- > Smart agriculture
- Smart horticulture
- > Golf course maintenance



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		
Moisture		
Range	0% ~ 100% RH	
Accuracy	±2%(0~50%), ±3%(50%~100%)	
Resolution	0.5%	
Temperature		
Range	-40°C ~ 80°C	
Accuracy	±0.5°C	
Resolution	0.1°C	
Conductivity		
Range	0~20000 μs/cm	
Accuracy	±3%(0~10000 μs/cm), ±5%(10000~20000 μs/cm)	
Resolution	1 μs/cm	
Operation		
Power On & Off	NFC, power button (Internal)	
Configuration	Mobile APP(via NFC) or PC software(via USB Type-C)	
Physical Characteristics		
Cable Length	2 m	
Power Supply	19000 mAh Li-SOCL ₂ battery (ER34615)	
Battery Life*	4 years (10 min interval, SF12)	
	>10 years (10 min interval, SF7)	
Operating Temperature	-30°C to +70°C	
Relative Humidity	0% to 100% (non-condensing)	
Ingress Protection	IP66 (Transceiver)/IP68(Soil Sensor)	



	Transceiver: 105.4 × 71 × 69.5 mm (4.1 × 2.8 × 2.7 in)
Dimension	Soil Sensor: 88 × 68 × 26 mm (3.5 × 2.7 × 1.0 in)
	(Probe length: 50mm/1.97 in)