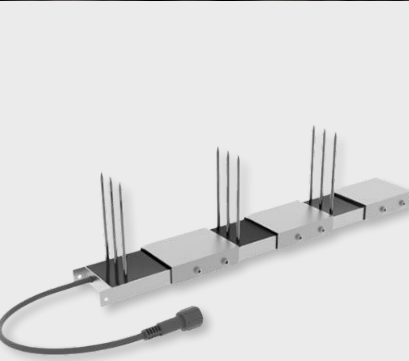
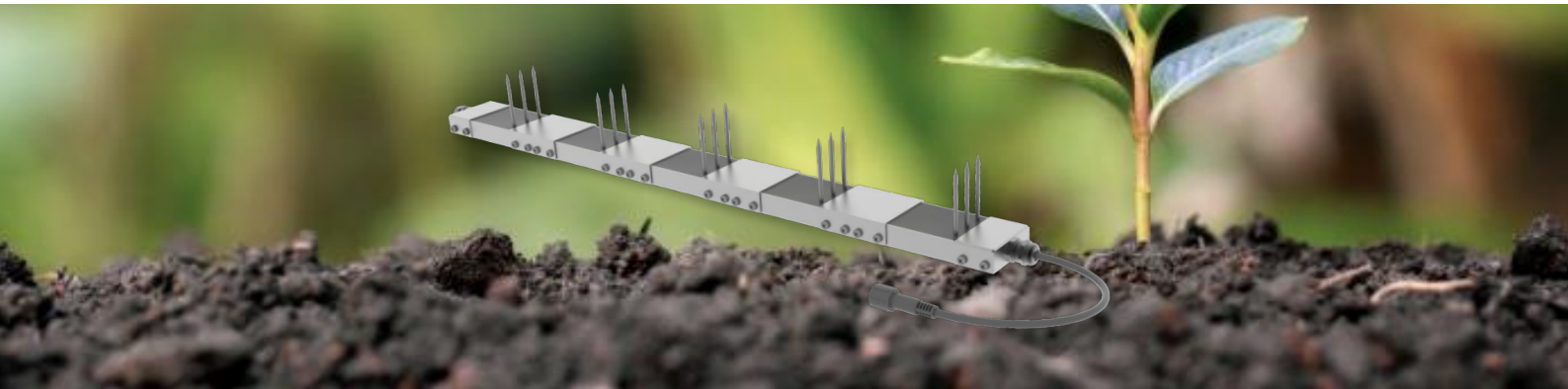


Multi layer soil sensor

Model ES-S2255



Main features

- Dynamic observation of soil conductivity, moisture content and temperature status at different levels.
- Completely sealed, resistant to acid and alkali corrosion, can be buried in the soil or directly put into water for long-term dynamic detection.
- The electrode is made of specially treated alloy material, which can withstand strong external force impact and is not easy to be damaged.

Compliance

The electromagnetic compatibility in accordance with the following applicable directives:
 EMC 2014/30/EU
 Electromagnetic Compatibility
 EMC 2014/35/EU
 Electromagnetic Compatibility

Introduction

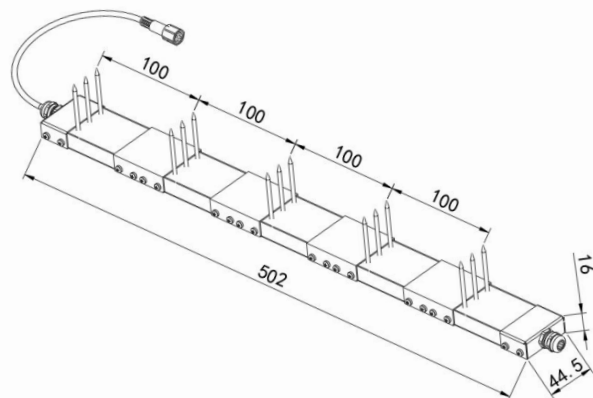
ES-S2255 multi-layer soil sensor is a sensor developed by our company that can measure multi-layer soil parameters. It can dynamically observe the soil conductivity, moisture content and temperature status of different layers. This detector can detect the temperature and humidity status of the soil conductivity of 3 layers at the lowest and the temperature and humidity status of 5 layers at the highest, and can quickly and comprehensively understand the soil parameter information. The product adopts standard Modbus-RTU485 communication, with a maximum communication distance of 2000 meters and supports secondary development.

The product shell is made of stainless steel, completely sealed with black flame-retardant epoxy resin, resistant to acid and alkali corrosion, and can be buried in the soil for long-term dynamic detection.

Application

This product is suitable for soil moisture monitoring, scientific experiments, water-saving irrigation, greenhouses, flowers and vegetables, grasslands, soil rapid testing, plant cultivation, sewage treatment, precision agriculture, etc.

Dimension



*Default 10 cm per layer, other length can be customized

Specification

Power supply	DC 5-30V	
Max. Power consumption	1.1W (12V DC power supply)	
Working temperature	-40°C~+80°C	
Conductivity	Range	0-20000us/cm
	Resolution	10us/cm
	Accuracy	± 3% in the range of 0-10000 US / cm ; ± 5% in the range of 10000-20000 US / cm
Soil moisture	Range	0-100%
	Resolution	0.1%
	Accuracy	(within 0-50%)2%, (within 50-100%)3%
Soil temperature	Range	-40~80°C
	Resolution	0.1°C
	Accuracy	±0.5°C
Temperature compensation	Conductivity: Built in temperature compensation sensor, the compensation range is 0-50 °C	
Protection grade	IP68	
Probe material	anti-corrosion special electrode	
Sealing material	black flame retardant epoxy resin	
Default cable length	1 meter, cable length can be customized as required	
Output signal	RS485 (Modbus Protocol)	

Order guide

ES-S2255	multi-layer soil sensor			
	CODE	Function type		
	A	temperature		
	B	humidity		
	C	conductivity		
		CODE	Number of layers (default 10cm each layer)	
		1	3 layer	
		2	4 layer	
		4	5 layer	
		5	...more customized	
			CODE	Signal output
			A	RS485
			B	Lora/4G/NB-IOT
ES-S2255	A	1	A	Order example