

Isolated soil sensor

Model ES-S2253



Main features

- Electrical isolation can resist complex interference
- German imported sensor, high stability
- With temperature compensation module and data processing module, high precision
- 316 stainless steel probe, IP68 sealed, can be directly buried in the soil
- Supports simultaneous measurement of soil temperature and humidity, EC, pH, NPK

Compliance

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

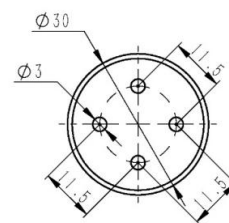
Introduction

ES-S2253 Electrically isolated soil sensor, with electrical isolation design, can resist complex interference environment on site. It supports single measurement of temperature and humidity, EC, pH value, nitrogen, phosphorus and potassium or all-in-one simultaneous measurement. The sensor uses a sensor imported from Germany, with its own temperature compensation module and data processing module, and has high adaptability to the use environment. 316 stainless steel probe, IP68 protection level, good sealing, can be directly buried in the soil for use, and is not corroded.

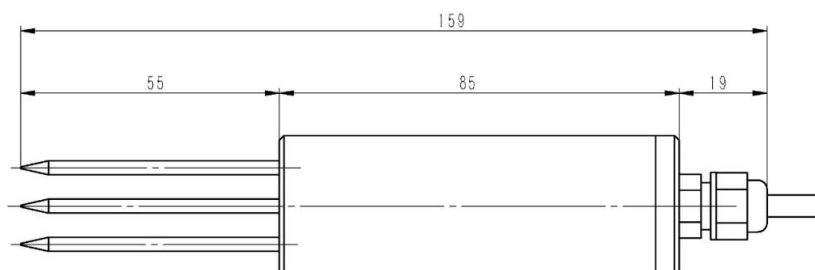
Application

It is used in water-saving agricultural irrigation, meteorological monitoring, environmental monitoring, greenhouses, flowers and vegetables, grassland pastures, soil rapid testing, plant cultivation, scientific experiments and other fields that need to measure soil temperature and humidity, electrical conductivity, soil pH, and soil nitrogen, phosphorus and potassium.

Dimension



Unit:mm



Specification

PARAMETERS	Soil moisture	Soil temperature	Soil EC	Soil PH	Soil NPK
Range	0~100% or customized	-30~70°C or customized	0 ~ 2000 μ S/cm, 0 ~ 10000 μ S/cm, 0 ~ 20000 μ S/cm	3~10PH	0~1999mg/kg (mg/L)
Accuracy	±2%	±0.2°C	±2%	±1	±3%
Resolution	0.1%	0.1°C	1us/cm	0.01	1mg/kg (mg/L)
Output signal	4-20mA, 0-10V, 0-5V, RS485 (standard Modbus-RTU protocol, device default address: 01)				
Power supply	7~24V DC				
Working temperature	-30°C~+70°C				
Stabilization time	3 seconds after power-on				
Response time	<1 second				
Electrical isolation	1650V				
Probe length	55mm, ϕ 3mm				
Probe material	316L stainless steel				
Sealing material	ABS engineering plastic, epoxy resin, waterproof grade IP68				
Cable specification	standard 2 meters (other cable lengths can be customized, up to 1200 meters)				

Order guide

ES-S2253	Soil sensor		
	CODE	Function type	
	A	Soil humidity	
	B	Soil temperature	
	C	Soil conductivity (EC)	
	D	Soil PH	
	E	Soil nitrogen (N)	
	F	Soil phosphorus (P)	
	G	Soil potassium (K)	
		CODE	Signal output
		1	RS485
		2	4~20mA
		3	0~10V
		4	0~5V
ES-S2253	ABC	1	Order example