

## NSS860 MULTI-DEPTH SOIL MOISTURE SENSOR

### AFFORDABLE MULTI-DEPTH SOIL MOISTURE SENSOR MONITORING SYSTEM

The NviroSense multi-depth soil moisture sensor system offers an affordable and expandable solution for precise crop management. This system allows for the strategic placement of soil sensors across your farmland, enabling effortless and comprehensive monitoring of the entire area through a user-friendly platform.

This device is designed to dynamically monitor soil moisture and temperature conditions at varying depths, offering two configuration options with either 3 or 5 sensor layers. With its ability to swiftly and accurately gather soil moisture data, the NviroSense system empowers farmers to make informed and scientifically-backed decisions for effective drought management strategies.

- The shell of this multi-depth soil sensor is made of PVC plastic pipe, with high-frequency detection waves of nearly 1 GHz emitted inside, allowing effective penetration through the plastic pipe to sense the soil environment.
- The multi-layer soil sensor is not affected by salt ions in the soil; agricultural activities such as fertilizers, pesticides, and irrigation do not affect the measurement results, ensuring accurate data.
- The electrode of the sensor is not in direct contact with the soil, avoiding electrical interference with the soil and the plants within.
- The multi-depth soil sensor adopts the standard Modbus-RTU485 communication mode, with the farthest communication distance reaching up to 2000 meters.
- Supports 10-30V wide voltage charging.



### KEY SPECIFICATIONS

Category	Feature	Specification
<b>General</b>	Power Supply	10-30VDC
	Operating Temperature	-40°C-80°C
<b>Measuring Range</b>	Soil Moisture	0~100%
	Soil Temperature	-15°C~35°C
<b>Accuracy</b>	Soil Moisture	±5%(@50%, 25°C)
	Soil Temperature	±0.5°C(25°C)
	Measuring Point Spacing	10cm
	Shell Material	PVC Plastic Pipe
	Protection Level	IP68
	Output Signal	RS485 (Modbus Protocol)

## FEATURES AT A GLANCE



### YOUR WIRELESS NETWORK

Develop a fully owned private LoRa network to capture, route and process IoT data for your application at multiple facilities.



### RUGGED DURABILITY WITH A BROAD SENSOR ARRAY

Robust enclosures provide a resilient platform for recording and delivering data from within a range of harsh environments.



### COMPREHENSIVE SECURITY AND RELIABILITY

Robust multi-layer security at each interface to safeguard your network at every level.



### BROAD CERTIFICATION AND APPROVALS

CFR 21 (part 11), PPECB, FCC, IC, CE, ASNZS, NCC, and Bluetooth SIG listing.



### THE PLATFORM FOR BUILDING ACTIONABLE IoT INTELLIGENCE

Route sensor data to the cloud with NviroSense's simplified wireless connectivity deployment.



### PERSONAL SUPPORT FOR YOUR IMPLEMENTATION

Support works with NviroSense engineering to help configure and deploy your application.

## APPLICATION AREAS



PHARMACEUTICAL WAREHOUSING



COLD CHAIN MANAGEMENT & FOOD SAFETY



IN-FIELD AGRICULTURAL MONITORING



INDUSTRIAL & MINING APPLICATIONS

## NVIROSENSE SUPPORT



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