



# Mod. SUT1

## High Precision Soil Moisture Sensor

#### **Highlighted specs**

- High precision soil moisture sensor no conductivity based
- Measures % water content (WC)
- Wide salinity range and anticorrosion
- Easy to install and light weighted
- WMO standards compliant
- Supplied with calibration report
- Maintenance and re-calibration not required
- According to CE norms

The soil moisture sensor is a **device which detects the amount of water present in the soil**, a necessary information to determine the uniformity of the **growth conditions of the plants** and for the following corrective actions. Understanding the real state of soil moisture leads to a **careful management of water resources** and treatments to preserve the health of the plants. The water in the soil is an electrical conductor and according to its concentration is possible to obtain an indication of humidity in the soil as much more accurate as more complex is the method of measurement. The sensor uses a frequency measurement (FDR), is precise and temperature compensated to achieve an accuracy up to 3%. **Electrical standard output** is **0÷1.5Vdc** for a range up to 100%VWC.

Range	0÷100% VWC (% water content)
Accuracy	± 3% (0-70%WC)
Time constant	1 s (average time)
Working temperature	-20 ÷ 60°C
Salinity range	100 to 1000mS/m
Standard signal output	0÷1.5Vdc differential
Protections	Polarity reverse and transient
Made of	IP68 Body in resin, stainless steel electrodes
Power Consumption	5÷15 Vdc; 20mA for 1s
Weight	100g
Dimensions	145 x ø40mm

#### Size and connections



### Order Code

Sensor	Soil moisture sensor (volumetric content)		SUT1		
Output	0÷2Vdc (MCS option)			А	
	4÷20mA (MCS option)			В	
	RS485 / Modbus (MCS option)			С	
Accessories	CS10 – Cable 10m sensor-datalogger				10
	CSxx – Cable xx* m length, sensor-datalogger – to be specified at order				xx
*specify the length for no standard measures example of order code SUT1		SUT1	Α	10	

NESA Srl Via Crociera 11 - 31020 - Vidor (TV) - Italy - Tel+39.0423.985209 - Fax+39.0423.985305 info@nesasrl.it - www.nesasrl.it