



- Sub-surface probe with MODBUS and SDI-12 interface options.
- Up to 15 sensors per probe with lengths from 200 to 1600 mm.
- Easy to install in any type of soil.
- Low energy consumption.

Description

The SMP subsurface probe is a capacitance-based soil moisture and temperature monitoring device offering up to 15 sensors per probe. The subsurface probe requires an external logger and external power supply to collect soil temperature and moisture profile information. The sensors are encapsulated inside a probe rod at different depths with a pitch of 10 cm, and the measurement of each pitch represents the value of the respective 10 cm interval [-5; +5].

Thanks to its tapered shape, the probe can be easily installed in most types of soil. In addition, SMP can be completely buried, ensuring a fully customizable measurement step while reducing the risk of damage to machinery.

The probe can be supplied in different lengths from 200 mm to 1600 mm.

SMP is supplied with a 5 m cable for power and signal.



Main features

- **Quick and easy installation**
- **High reliability for long-term use**
- **Customizable measurement step**
- **The number of sensors increases with the depth of the sensor**

Specifiche Tecniche*

Measurement performance

Temperature

Accuracy $\pm 2^{\circ}\text{C}$

Resolution $0,2^{\circ}\text{C}$

Humidity

Accuracy $<\pm 0,2\% \text{ Vol}$

Resolution Approximately 13 bits

Operating conditions

Temperature $-20^{\circ}\text{C} \div +50^{\circ}\text{C}$

Output types

RS485-Modbus / SDI-12 Volumetric water content [%]; temperature $^{\circ}\text{C}$

Power supplies and consumption

Supply voltage $3,3 \div 14 \text{ Vdc}$

Power consumption (mA)	Minimum	Typical	Maximum
	0.01	-	23

Mechanical specifications

Rod diameter 32 mm

Material Plastico

protection IP67

Ordering codes

Modbus PSM-t003t-SMP

*Variations in sensor performance characteristics are possible upon request and after calibration.