

# SOIL AND TEMPERATURE SENSOR

PCE-FST-100-2006-SMS



- » **Measurement of soil moisture and temperature**
- » **Protection class: IP68**
- » **Output: RS-485 Modbus RTU**
- » **Robust housing**

The soil and temperature sensor is ideal for monitoring agricultural areas, gardens, green spaces or greenhouses. With the soil and temperature sensor, soil moisture and soil temperature can be precisely recorded in order to optimise irrigation of plants or carry out scientific measurements.

The soil and temperature sensor measures the soil moisture from 0 ... 100 % with a resolution of 0.1 %. The accuracy is 3 % for a moisture range of 0 ... 50 % and 5 % at 50 ... 100 %. The floor temperature is recorded from -30 ... +85 °C with a resolution of 0.1 °C and an accuracy of  $\pm 0.5$  °C. The soil and temperature sensor is robust, waterproof, corrosion-resistant, suitable for permanent installation in the ground and has IP68 protection. The output is via RS-485 so that the measured values can be further processed digitally.

The soil and temperature sensor provides precise data for field measurements and automated irrigation and is used by farmers, gardeners and environmental researchers who want to reliably monitor soil conditions.

## Specification

### Humidity

Material Soil

Measurement range up to 0 ... 50 %

Resolution 0,1 %

Accuracy 3%

### Humidity

Material Soil

Measurement range up to 50 ... 100 %

Resolution 0,1 %

Accuracy 5%

### Temperature

Measurement range up to -30 ... +85 °C

Resolution 0,1 °C

Accuracy ±0.5°C (@25°C)

### General technical data

Outputs RS485

Cable length 1 m

Protection class (device) IP68

Power supply 12 ... 24 V DC

Operating conditions -40 ... 80 °C, 0 ... 100 % RH

Storage conditions -40 ... 80 °C, 0 ... 95 % RH

Dimensions ( L x W x H ) 135 x 45 x 13 mm

Weight 120 g