SMT100 Soil Moisture Sensor

Specifications

Accuracy:	Soil volumetric water content (VWC)	Using factory calibration up to ± 3% (VWC) in mineral soils with moderate salinity from 0 to 50% VWC Using medium specific calibration up to ± 1% (VWC)
	Temperature	Typical ± 0.2°C / 0.4°F, max. ± 0.4°C / 0.7°F over full range Analog version ± 0.8°C / 1.4°F
	Additional output	Raw measurement data Dielectric permittivity
Resolution:	0.1% volumetric water content or better 0.01°C / 0.02°F or better (analog version 0.2°C / 0.4°F)	
Range:	0 to 60% volumetric water content (up to 100% volumetric water content with limited accuracy) Temperature: -40°C to +80°C / -40°F to +176°F (analog version -40°C to +60°C / -40°F to +176°F)	
Interface options:	RS485 with TBUS RS485 with Modbus RS485 with ASCII SDI-12 Analog: 0 - 10 V (other voltage ranges on request) 4 - 20 mA (only volumetric water content)	
Power:	4-24 V DC, up to 40 mA during measurement (analog version 12 - 24 V DC for 0 - 10 V output) (4 - 20 mA version 12 - 32 V DC) Measurement time digital versions: less than 50 ms Measurement time analog versions: less than 500 ms	
Cable length:	10 m / 32.8 ft (customizable)	
Sensor dimensions:	18.2 cm x 3 cm x 1.2 cm / 7.2 in x 1.2 in x 0.5 in	
Environmental protection:	IP68	
Data logger compatibility:	Any logger capable of appropriate power excitation and RS-485 (TBUS, Modbus, ASCII), SDI-12, analog input or 4 - 20 mA input Free PC logger software available on request	