

Soil Moisture

SOIL

100SMT



The 100SMT is an accurate soil moisture probe for monitoring water content and soil temperature. The oscillation frequency is related to the dielectric permittivity of the surrounding medium. The relation between the permittivity and the soil moisture depends on the soil type and the soil temperature. Therefore all dielectric measurement techniques require a material and temperature dependent calibration for highest precision.

Multilayer printed circuit board	Butyrate body, ceramic tip, neoprene stopper
Overall dimensions	220 x 32 x 10 mm
Connector cable length	1-10 m
Volumetric water content accuracy	~ 1.5 % (depending on soil specific calibration)
Volumetric water content resolution	~ 0.5 %
Temperature range for temperatur	-55°C to 125°C
Temperature range for permittivity	-10°C to 70°C
Temperature accuracy	± 0.5°C
Weight	approx. 250 g
Power consumption	65 mA for less that 1s during measurement
Voltage supply	4-12 VDC, up to 28V on request Reverse polarity protection and overvoltage protection
Digital interface	RS485
Other interfaces	SDI-12, USB, analog on request
Identification	unique 24bit identifier for each sensor (digital readout)

- IM5041D
- SAR19
- ECH500
- ECH510
- ECH5TM
- ECH5TE
- ECH511
- MD510SM
- AQ600
- TNS103..7
- SEN12512
- SEN13512
- 100SMT**
- ECH870E
- ECH871E
- ECH874E
- WM-BUS
- TNS100