

FACT SHEET

Pico IPH Sensor

An intelligent and compact sensor for the continuous and non-destructive determination of the volumetric soil moisture content of soil.



A soil moisture measuring sensor for mobile field use

Advantages

- Very accurate TDR technology
- Measurement of soil profiles in 16cm increments to a depth of 3 metres
- 0...60% vol soil moisture content measurement
- Measurements are taken from within a TECANAT polycarbonate access tubes which can be left in the soil
- The system enables cable lengths of up to 25m
- Automatic TDR electronics are housed in a robust and waterproof (IP-68) PVC-cylinder
- Sensor will withstand the toughest demands of permanent field use
- Low power consumption.

Specifications

Power supply:	7V..24V-DC
Power consumption:	100mA @ 12V/DC during 2..3sec. of measuring
Moisture measuring range:	0..100% volumetric water content
Conductivity range:	0..6dS/m 6..12dS/m 12..50dS/m
Moisture range 0..40%:	±2% ±3%
Moisture range 40..70%:	±3% ±4% with tube access probe T3C/44
Repeating accuracy:	±0.3% ±0.5%
Temperature drift:	±0.3%
Soil temp measuring range:	-15°C...50°C
Soil temp measuring accuracy:	±0,2°C
Measurement volume:	3,0L, 180x150mm diameter
Operating Temperature:	-15°C...50°C (extended temperature range on request)
Calibration:	Standard calibration for most soils Customizable material specific calibration Storage of up to 15 user defined calibration curves Calibration of dielectric permittivity is possible
Probe body:	Waterproof sealed PVC (IP68)
Size:	166 x Ø32mm
Rod length:	Standard: 180mm
Interfaces:	RS485 Analogue output: 2x 0..1V, 0(4)..20mA 0..100% vol. water content -40..+70°C soil temperature
RS485 & analogue:	3,5m cable with 7-pin female connector.