

NEW!

Soil moisture measurement with
simultaneous soil temperature
measurement

TRIME®-PICO

The intelligent soil moisture sensor

Highest accuracy by the use of the latest TDR electronics

Measure direct 0...100% vol. soil water content

Bulk soil electrical conductivity up to 12dS/m

Reliable multi-point digital/serial networking

Integrated soil temperature sensor

Rods exchangeable

Maintenance-free

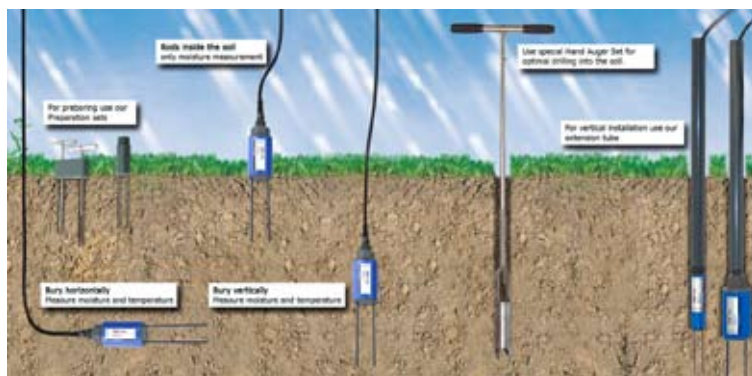
Easy to use



TRIME®-PICO32/64

Soil moisture sensors with internal TDR-electronics

IMKO's intelligent rod probes are highly sophisticated high-tech devices and extremely robust. A unique feature is their integrated TDR electronics, thus achieving the greatest accuracy and best networking capability e.g. digital network cable lengths of up to 3 km are possible for the IMP-Bus version. In contrast to other methods TRIME®-PICO is less effected by disturbing variables such as temperature or electrical conductivity. An integrated temperature sensor gives valuable additional information. Due to its mechanical robustness TRIME®-PICO is recommended for mobile use together with TRIME®-HD or Bluetoothmodule PICO-BT.



TRIME-PICO64

For in situ monitoring of volumetric moisture in soils and other porous materials. The large measuring volume is particularly suitable for applications in heterogeneous and skeletal media. Burying capability for both horizontal and vertical orientation.

TRIME-PICO32

For in situ monitoring of volumetric moisture in soils and other porous materials. The small measuring volume permits high spatial resolution. Burying capability for both horizontal and vertical orientation.

Technical Data

	TRIME®-PICO64			TRIME®-PICO32		
Power supply:	7V..24V-DC					
Power consumption:	100mA @ 12V/DC during 2..3sec. of measuring					
Moisture measuring range:	0..100% volumetric water content					
Accuracy (in % volumetric water content):						
conductivity range:	0..6dS/m	6..12dS/m	12..50dS/m	0..6dS/m	6..12dS/m	12..50dS/m
Moisture range 0..40%:	±1%	±2%	with material specific calibration	±1%	±2%	with material specific calibration
Moisture range 40..70%:	±2%	±3%		±2%	±3%	
Repeating accuracy:	±0.2%	±0.3%		±0.2%	±0.3%	
Temperature caused drift of electronics (full range):	±0.3%					
Soil temperature measuring range:	-15°C...50°C					
Soil temperature measuring accuracy:	±0,2°C					
Measurement volume:	1,25L ± 160x100mm diameter			0,25L ± 110x50mm diameter		
Operating Temperature:	-15°C...50°C (extended temperature range on request)					
Calibration:	Calibration for a wide range of standard soil types (in accordance with Topp (equation))					
	standard calibration for most soils, customizable material specific calibration, storage of up to 15 user defined calibration curves, calibration of dielectric permittivity is possible			standard calibration for most soils, customizable material specific calibration, storage of up to 15 user defined calibration curves, calibration of dielectric permittivity is available		
Probe body:	waterproof sealed PVC (IP68)					
Size:	155 x Ø63mm			155 x Ø32mm		
Rod length:	standard: 160mm			standard: 110mm		
Rod diameter:	6mm			3,5mm		
Interfaces:	IMP-BUS RS485 Analogue output: 2x 0..1V, 0(4)..20mA ¹ 0..100% vol. water content -40..+70°C soil temperature					
Option 1 (RS485 & analogue):	1,5m cable with 7-pin female connector					
Option 2 (IMP-BUS):	5m cable with 4-pin female connector					
Option 3 (all interfaces):	5m cable with end splices (all interfaces)					
	Optional available for cable extension: E-BOX (cable extension box)					
	¹ Optional available for cable extension and current output: C-BOX (0..1V to 0(4)..20 mA converter box)					