TRIME®-PICO

The intelligent soil moisture sensor

Measures 3 important parameters:

- Water Content
- Temperature
- Electrical Conductivity (EC) and Salt Content

SDI-12 interface

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[®]-PICO64/32 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 HD2 or Bluetoothmodule PICO-BT.

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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 [©] -PI	TRIME [©] -PICO32		
Power supply:		7V24V-DC						
Power consumption:		100mA @ 12V/DC during 23sec. of measuring						
Moisture measuring range:			0100% volumetric water content					
Accuracy (in % volumetric v	water content):							
Conductivity range:		06dS/m	620dS/m	>20dS/m	06dS/m	620dS/m	>20dS/m	
Moisture range 040%:		±1%	±2%	with material	±1%	±2%	with material	
Moisture range 4070%		±2%	±3%	specific calibration	±2%	±3%	specific calibration	
Repeating accuracy:		±0.2%	±0.3%		±0.2%	±0.3%		
Temperature caused drift o (full range):	of electronics			±0.3%				
Soil temperature measu	ring range:	-15°C50°C						
Soil temperature measuring accuracy:		±1,5°C absolute; ±0,5°C relative						
Measurement volume:		1,25L ≙ 160x100mm diameter			0,25L ≙ 110x50	0,25L ≙ 110x50mm diameter		
Operating Temperature:		-15°C50°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 calibr storage of up to 15 user defined cal calibration of dialectric permittivity		s, libration, calibration curves, ty is possible	standard calibration for most soils, customizable material specific calibration, storage of up to 15 user defined calibration curve calibration of dialectric permittivity is available		ls, libration, calibration curves, ity is available	
Probe body:		waterproof sealed PVC (IP68)						
Size:		155 x Ø63mm			155 x Ø32mm	155 x Ø32mm		
Rod lenght:		standard: 160mm			standard: 110r	standard: 110mm		
Rod diameter:		6mm			3,5mm	3,5mm		
Interfaces:	terfaces: IMP-BUS, RS485 or SDI-12, Analogue output: 2x 01V, 0(4)20mA ¹							
Options	Interfaces	٨٥٢	lication		Cable length	C	onnector	

Options	Interfaces	Application	Cable length	Connector
Option 1:	RS485 & analogue	mobile for HD2 and PICO-BT	1,5 m	7-pin female
Option 2:	IMP-BUS	for globeLog datalogger	5 m (special length on request)	4-pin female
Option 3:	RS485, IMP-BUS & analogue	for analogue datalogger Optional: E-BOX (cable extension box) ¹ Optional available for cable extension and current output: C-BOX (01V to 0(4)20 mA converter box)	5 m (special length on request)	10-pin end splices
Option 4:	SDI-12, IMP-BUS & analogue	for SDI-12 datalogger	5 m (special length on request)	9-pin end splices