

TRIME®-PICO

The intelligent soil moisture sensor

Measures 3 important parameters:

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

NEW

SDI-12 interface

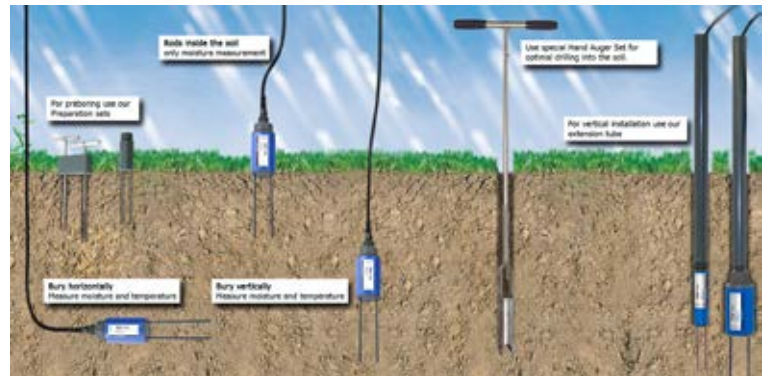
- ✓ Highest accuracy by the use of the latest TDR electronics
- ✓ Measure direct 0...100% vol. soil water content
- ✓ Bulk soil electrical conductivity up to 12dS/m
- ✓ Reliable multi-point digital/serial networking
- ✓ Integrated soil temperature sensor
- ✓ Rods exchangeable
- ✓ Maintenance-free
- ✓ 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.



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..20dS/m | >20dS/m | 0..6dS/m | 6..20dS/m | >20dS/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: | ±1,5°C absolute; ±0,5°C relative | | | | | |
| 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 or SDI-12, Analogue output: 2x 0..1V, 0(4)..20mA ¹ | | | | | |

| 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 (0..1V 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 |