

# JTPM-3 Soil Temperature Profile Probe

To measure the temperature profile in soils in six fixed depths.

Inside a tube made of glass-fibre reinforced plastic (GRP) 6 temperature sensor elements are placed in different depths. Each sensor element has direct contact to a stainless steel ring which is embedded into the tube's surface. This ensures that each sensor has direct contact to the soil.

The 6 sensors are placed in the depths 5, 10, 20, 30, 50 and 100 cm.

The probe is completely inserted into the soil until the top edge of the tube is on a level with the ground surface. The probe's cable will exit the tube in a depth of 8 cm and then is buried below the ground surface. Thus, thermal influences by the ambient temperature are excluded.

The JTPM-3 has analogue output signals 0 to 1 V corresponding to  $-20 \sim 50^{\circ}\text{C}$ . Each depth requires an individual logger channel, thus 6 channels need to be available.



## Typical Applications

Measurement of the temperature profile in soils

## Limitations

Not suitable for usage as a insertion probe for spot readings

## Technical Information

Measuring depths (other depth on request)	5 cm, 10 cm, 20 cm, 30 cm, 50 cm, 100 cm
Measuring range	$-20^{\circ}\text{C} - +50^{\circ}\text{C}$
Accuracy	$\pm 0,1^{\circ}\text{C}$
Resolution	$0,03^{\circ}\text{C}$
Signal output	6 x 0 ... 1 V
Signal output	RS485-tensioLINK/SDI12
Power supply	6 ... 18 VDC
Housing	Glass-fibre reinforced plastic (GRP), sharpened tip, embedded stainless steel rings
Length	1035 mm
Diameter	20 mm