



Soil/Water Temperature Probe QMT102, QMT103, and QMT110



Features

- The Pt100 sensor element type, specified accuracy level of 1/4 IEC 60751 Class B
- Excellent accuracy, repeatability, and long-term stability
- Wide operating temperature range
- Watertight (IP68)
- Stable, highly accurate temperature sensor ideally suited for measuring soil, air, leaf and water temperatures
- Calibration traceable to international standards

Vaisala Soil/Water Temperature Probes QMT102, QMT103, and QMT110 are particularly well suited for the precision measurement of ground and soil temperatures.

Carefully selected materials

All the materials used in the probe's manufacture have been carefully selected to withstand various types of environmental stress and a wide range of temperatures.

Highly accurate measurements

The measurement accuracy and stability of QMT102, QMT103, and QMT110 are based on a Pt100 type sensor element, which is specified to a level of precision

of 1/4 IEC 60751 Class B. The probe includes a cable with a black, weather-resistant polyurethane (PUR) sheath that withstands both abrasive wear and extreme temperatures. A 5-pin watertight connector is molded to the other end of the cable for quick installation and replacement in Vaisala weather stations.

Probe variants

The offering has the following probe variants with different cable lengths:

- QMT102: 2 m (6 ft 7 in)
- QMT103: 5 m (16 ft 5 in)
- QMT110: 10 m (32 ft 10 in)

Technical data

Measurement performance

Sensor type	Pt100-type resistance temperature detector element
Accuracy	1/4 IEC 60751 Class B > 0.08 °C at 0 °C (+32 °F)
Sensitivity	0.385 Ω/°C (IEC 60751)

Operating environment

Operating temperature (fixed installation)	-40 ... +80 °C (-40 ... +176 °F)
Operating temperature (flexible installation)	-25 ... +80 °C (-13 ... +176 °F)
IP rating	IP68

Compliance

EU directives	RoHS
Compliance marks	CE

Mechanical specifications

Dimensions (L × Ø)	150 × 6 mm (5.91 × 0.24 in)
Material	Stainless steel AISI 316

Cable

Material	Black polyurethane (PUR), 5 × 0.34 mm ² Cu
Length	<ul style="list-style-type: none">• QMT102: 2 m (6 ft 7 in)• QMT103: 5 m (16 ft 5 in)• QMT110: 10 m (32 ft 10 in)

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