Thermo-Hygrometer with 1.4 m Cable

PULSONIC

TH-0156

LowPower Technology

Main features

- PT-100 4 wires
- Precision
- Combined sensor
- Easy maintenance
- Plug and play

TH-0156 is a thermo-hygrometer designed and manufactured by PULSONIC that provides reliable temperature (Pt-100) and relative humidity measurement for all meteorological applications. Low power consumption, reliable, easy to install and maintain, it has all the necessary features to meet the expectations of meteorological services.

TH-0156 measures air humidity and air temperature. **TH-0156** can be configured as a hygrometer only or as a thermo-hygrometer. Typically installed in a meteorological shelter, it measures air humidity and air temperature with its "Pt-100" sensor element to meet the requirements of meteorological applications.

Easy maintenance

TH-0156 is equipped with a waterproof connector to allow easy and quick removal of the cable for maintenance purposes. PULSONIC recommends an annual calibration and adjustment.

The filter holder can be easily screwed and unscrewed to allow the filter to be changed every year.

Plug and play

TH-0156 features PULSONIC's "plug & play" technology.

Indeed, **TH-0156** embeds its adjustment coefficients and makes them available to the datalogger. No need to enter them in the datalogger. This greatly facilitates maintenance operations in the field!

It is very easy to replace a sensor with a calibrated sensor. The sensor is serialized which simplifies the traceability of the maintenance.

Technical specifications

Temperature

Measuring range	-40°C to +70°C
Resolution	0,1°C
Accuracy	± 0,1°C
Measurement method	Pt-100, 4-wire configuration

Relative humidity

Measuring range	0 to 100%
Resolution	1%
Accuracy (0-90%)	±2%
(0-100%)	±3%
Stability	±1%
Long-term stability (5 years at 50% humidity)	±0,05%
Response time (wind 20L/min)	8s

Maintenance

Y-shelter	Clean when necessary
Mounting bracket for Y-shelter	Adjust if necessary
Filter	Replace annually
Calibration	Annually

Generated data* (WMO compliant)

Instant humidity (%)

Average instantaneous humidity (%)

Minimum humidity (%)

Maximum humidity (%)

Duration of humidity greater than or equal to 90% (min)

Duration of humidity greater than or equal to 80% (min)

Duration of humidity between 80% and 90% (min)

Moisture content less than or equal to 40% (min)

Dew point (°C)

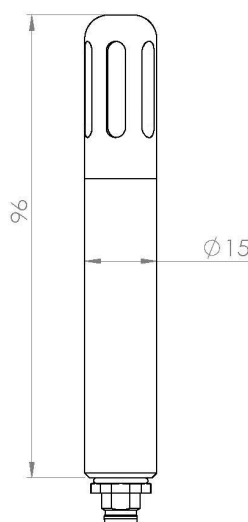*Data generated by the data logger P4-100

General specifications

Supply voltage	5V
Supply current	105 µA
Communication protocol	PULSONIC LAN
Operating temperature	-40°C to +70°C
Storage temperature	-40°C to +70°C
Dimensions	Ø15 x 96 mm
weight	20g
Filter	Hydrophobic glass fibre
Sensor connector	M8 male, 5 pins
Cable connector	M8 female, 5 pins
	M8 male, 3 pins
Cable length	1.4 m
Packaging	Individual anti-static protection bag
Delivered with	Calibration certificate (ISO 17025 traceable)

Ordering Codes

003470	Thermo-hygrometer with 1.4 m cable (Sensor only)
003268	Full kit: Sensor TH-0156 + cable + Y-shelter + support tube for PULSIA solar generator box
003485	M8 3-pins to M8 5-pins cable – Length: 1.4 m
003274	Mounting support for installation inside Y-shelter

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