THF-01 - temperature, humidity and atmospheric pressure wall sensor

 Dedicated temperature sensor for MT series telemetry modules

- Four versions available:
 - THF-01 temperature measurement,
 - THF-01 H temperature and humidity measurement,
 - THF-01 P temperature and atmospheric pressure measurement
 - THF-01 HP temperature, humidity and atmospheric pressure measurement
- Temperature measuring range: -40 °C to + 85 °C
- Humidity measuring range: 1.3% 100%
- Atmospheric pressure measuring range: 513 hPa 1100 hPa
- High accuracy and stability of measurements
- Low power consumption
- · Measuring period: 1 minute
- · Signals measured in frequency outputs form
- Two power sources: AC adapter or internal lithium battery
- Protection degree IP40
- · Protective gel covering the electronics
- Wall mounting
- ABS housing of dimensions 71 x 71 x 27 mm
- 3 year warranty period

The compact THF-01 module extends the measurement capabilities of selected MT series telemetry modules. Depending on the version, the THF-01 sensor measures physical quantities such as temperature, humidity and atmospheric pressure. The system is designed for telemetric modules equipped with pulse inputs operating in the frequency measurement mode, thus the typical analog inputs are not required for the measurement. The sensor housing allows mounting on any flat surface by means of a double-sided adhesive tape. The module is designed for indoor and outdoor use, enabling ambient climatic conditions monitoring. The device design incorporates an external source of power or direct power from an optional internal lithium battery (dedicated for use with battery-powered telemetry modules).



General

Supply voltage: From an external source 10 - 30 VDC From the internal lithium battery 3,6 VDC Supply current (without output load) 1 mA Measurement period 1 min Battery operating time (3.6 V / 2.5 Ah) 10 years Operating temperature range -40 to +85 °C IP40 Protection degree Housing dimensions 71 x71 x 27 mm

Temperature measurement:

Output frequency	0 °C = 10 Hz (5 °C/1 Hz)
Measuring range	-40 to 85 °C
Accuracy for 25 °C from -10 °C to +85 °C from -14 °C to +85 °C	±0,5 ℃ ±1 ℃ ±3 ℃
Resolution	0,1 °C

Humidity measurement:

Output frequency	50 %=10 Hz (5 %/1 Hz)
Measuring range	1,3 % - 100 %
Accuracy	±5 %
Resolution	0,1 %

Atmospheric pressure measurement:

Output frequency	1000 hPa=1 Hz (50 hPa/1 Hz)
Measuring range	513 hPa – 1100 hPa
Accuracy	±4 hPa
Resolution	1 hPa

Supplementary information:



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THF-01

Drawings and dimensions (all dimentions in millimeters)

