

TEMPERATURE & HUMIDITY SENSOR "macrowind L"

Sensor: Temperature & Humidity - Order No. T1000

Accessories: Weather- and Radiation Shield - Order No. T1010

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- **Compact meteorological sensor**
- **"Low Power" – type**
- **Stainless steel sinter filter for high load (sand, storm, salt fog)**
- **Very high measurement accuracy of 0.2°C**
- **Measurement range -30 to +70°C and 0 to 100% RH**



Measurement principle

The temperature and humidity sensor "macrowind L" is a compact sensor in rod design. The relative humidity is measured via a capacitive sensing element and made available as an active voltage signal.

The temperature is measured using a PT100-resistor (1/3 DIN).

The signal is also available as an active voltage signal. Due to the extremely low power consumption "macrowind L" is perfect for use in energy self-sufficient wind measurement systems.

The dual sensor is supplied with a protective stainless steel sinter filter, which guarantees a high reliability even at a high load (high wind speed, salt fog, sand).

Correct measurement

Install the sensor at a place, that is representative for the climate measurement and an adequate ventilation is ensured. To protect it from rain and direct sun radiation, a suitable weather protection is offered. It could be easily mount onto the sensor with a mast clamp.

Weather- and Radiation Shield: Order No. T1010

Technical Data

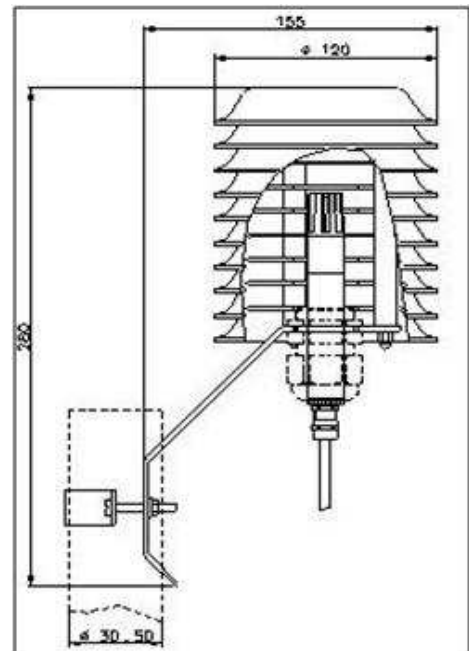
Type	Temperature	Humidity
Measurement range	- 30...+ 70°C	0...100% RH
Accuracy	± 0.2 K	± 2% RH
Additional error	± 0.004% / K (< 10°C, > 40°C)	< 0.1% / K (< 10°C, > 40°C)
Resolution	0.1 K	1% RH
Response time	5 min.	5 min.
Measurement principle	Pt 100 - 1/3 DIN	Capacitive
Output signal	0...1 V	0...1 V

Operation supply	9...30 V DC (internal power consumption < 2 mA)
Ambient temperature	- 40°C...+ 85°C
Protection class sensor / electronic	IP 30 / IP 65, measuring elements protected by stainless steel sinter filter
Weight	Sensor without cable: 0.350 kg, weather protection: 1 kg
Manufacturer	AbsolutWind

Wire Colours

Connection	Wire Colours
	Sensor Temp. & Humidity (T1000)
1 - Supply	green
2 - Mass	yellow
3 - Temperature	white
4 - Humidity	brown

Temperature & Humidity Sensor with Weather- and Radiation Shield



Subject to change