



Applications

- General Meteorology
- Weather services and Research
- Offshore Oil and Gas
- Aviation
- Sports

Features and Benefits

- Small dimensions
- Resistant to all weather conditions
- Anodized aluminum and plastic
- Different output signal
- Minimal maintenance
- Suitable for national met office

TPR159 is non-aspirated sensor designed to measure air temperature, relative humidity and pressure. It requires low maintenance and offers industry standard digital output.

As a sensing element for temperature, PT100 element is used. For RH measurements, there is compensated solid state capacitive sensor. For pressure measurements, there is sensor MEMS technology used. Sensor has to be mounted upright and should be overvoltage protected.

All sensing elements are protected from the solar radiation and precipitation by a shield, made of UV resistant plastics. On the bottom side of the sensor there are mounting element and 6-pin watertight connector to connect the sensor with the measuring system. To provide connection between the sensor and the measuring system a four wire shielded cable should be used, provided with USB and DB9 connectors. Max. length of cable depends on the wire resistance and the communication protocol (RS-232, RS-485 ali SDI).

Technical specifications

	TEMPERATURE	PRESSURE	RELATIVE HUMIDITY
Measuring range	-40 to + 60 °C	10 – 1200 mbar	0 – 100 %RH
Accuracy	+/- 0,15 °C	+/- 1 mbar	+/- 2%
Resolution	0,1°C	0,1 mbar	1%
Measuring system	RTO element Pt100	MEMS	semiconductor, capacitive sensor
Power supply	5 VDC USB optional 5 – 25 VDC		
Power consumption	10 mA		
Operating temperature	-40 to + 60 ° C		
Storage temperature	-50 to + 80 ° C		
Connector	Souriau, 6-pole, weatherproof / DB9 + USB		
Cable	5 wire, shielded, length: 5, 10, 15, 20 m		
Dimensions	φ 110 x H 170 mm		
Mass	160 g		
Mounting	mounting bracket, hole φ 6mm		
Material	body – anodised aluminium sun shield – UV stabilized plastic		
Output signal	RS232 (up to 20m), RS485 (up to 1200m) serial communication or SDI (up to 60m)		

Cable connection

