Economy Sensors

Outputs 4 - 20 mA, 0 - 10 V

- Accurate measurement of:
  - Temperature
  - Humidity
- Industrial design with protection up to IP65
  - Integrated sensors
  - With external probe
  - Detachable probe with calibration certificate (P3116)

product catalog
for analogue
sensors

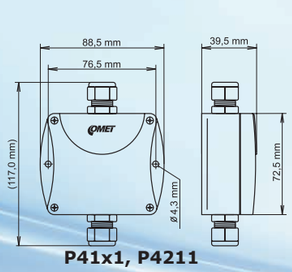
Temperature sensors with with fixed and unchangeable measuring

Transducers models P4211, P4121 to P4171, which lack an inherent temperature sensor, are engineered for converting signals from an RTD Pt1000 sensor (3850ppm/°C) into a current flow. The P0120 is specifically designed for measuring air temperature, while the P0132 transducer is tailored for temperature measurement within a stainless steel well (note: well not included). The temperature range for all models is fixed, and they output an analog 4-20 mA signal. These transducers are capable of being powered directly from the current loop. The electronic components are protected by an IP65 rating.

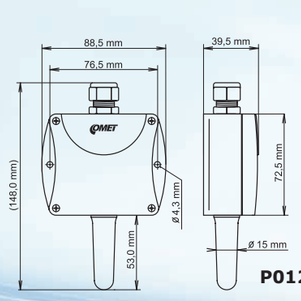
Sensor models and their specification

MEASURED RANGE	Transducer for exteral probe Pt1000			Built-in temperature sensor		
	4 - 20 mA	0 - 10 V**	accuracy	4 - 20 mA	0 - 10 V**	accuracy
- 100 °C to +200 °C	P6181*		±0,3 °C***			
- 50 °C to +50 °C	P6191*		±0,3 °C			
- 100 °C to +30 °C	P4141		±0,3 °C			
- 50 °C to +50 °C	P4191		±0,3 °C			
- 30 °C to +80 °C	P4121	P4211	±0,3 °C	P0120	P0210, P0212	±0,4 °C
0 °C to +35 °C	P4151		±0,2 °C			
0 °C to +150 °C	P4131		±0,3 °C	P0132		±0,4 °C****
0 °C to +250 °C	P4161		±0,4 °C			
0 °C to +400 °C	P4171		±0,7 °C			

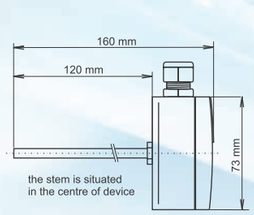
* Model for Pt100 probe - connection of a two-wire, three-wire or two-wire probe with a compensation loop
** Sensors with voltage output can also be powered from 24 Vac
*** ± 0.4 °C above 100 °C
**** Above 100 ° C 0.4% °C from the measured value



P41x1, P4211



P0120, P0210



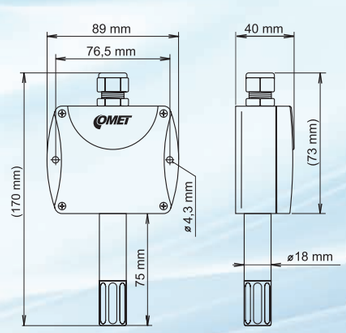
P0132, P0212

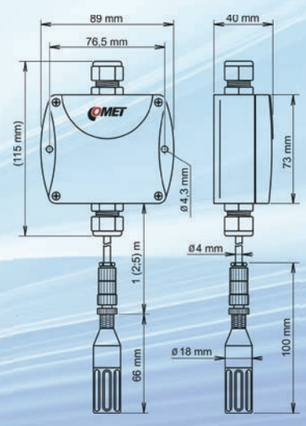
Temeprature and humidity sensors

Inexpensive sensor P3110E with 4-20mA output is designed to measure temperature and relative humidity in a no chemically aggressive environment. The P3116 sensor allows for the disconnection of the temperature and humidity probe, making it easier for easy installation and recalibration.

MEASURED VALUES		Temperature + relative humidity	Temperature + relative humidity
SENSOR MODEL		P3110E	P3116
temperature	range	-30 to +80 °C	-20 to +80 °C
	accuracy	±0,6 °C	±0,4 °C
relative humidity	range	0 to 100 % RH	0 to 100 % RH
	accuracy*	±3% RH	±1.8 % RH
output		4-20 mA	4-20 mA
computed values		NO	NO
protection class of the case with electronics		IP65 / IP40	IP65 / IP40

* Relative humidity accuracy from 5 to 95% at 23°C

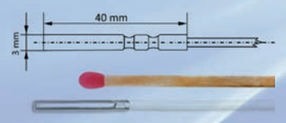




External temperature probes

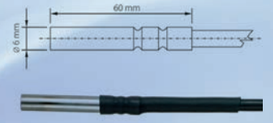
Temperature probes attached to cables are specifically designed for measuring temperatures in certain applications. These probes are available in lengths of 1, 2, 5, and 10 meters. To ensure high-precision measurements, it is not recommended to use probes that exceed 20 meters in length. Unless otherwise specified, the probes are manufactured to Class A accuracy standards.

Ultra thin temperature probe.



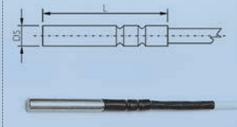
Pt1000TG3/E
(-50°C to +200°C)

Universal, watertight temperature probe rated IP68, designed for long-term monitoring of temperature in liquids.



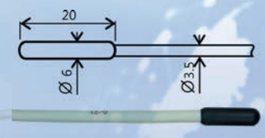
Pt1000TG68/E
(-80°C to +200°C)

Cryogenic temperature probe designed for ultra-low temperature measurements.



Pt1000TR125/E
(-190 to +150°C)

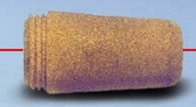
Cost-effective probe featuring a plastic housing and slow response time, rated with IP67 for protection.



Pt1000TR160/E
(-30°C to +80°C)

Sensor covers for improved protection for external probes

F5300 - Teflon (PTFE) sensor cover (white color), featuring increased resistance against splashing water, a non-absorbent surface, and rust-free properties. Porous size: 25µm. Temperature range: -40°C to +125°C.



F0000 - Sintered bronze sensor cover for moderately aggressive environments. Filtering ability: 0.025mm.

F5200 - Grey sensor cover with filter made from stainless steel mesh, filtering ability 0.025mm.
F5200B - Black sensor cover with filter made from stainless steel mesh, filtering ability 0.025mm.

Temeprature and humidity sensor T3116

For connecting current loops, use a shielded cable that has a maximum length of 1200 meters and an external diameter ranging from 4 to 8 mm.

The cable of the external probe can be easily disconnected, reconnected, or replaced as needed. Access to the connection terminal block is provided by removing the cover.

Connector for connecting the SP003 cable, which allows for the change of temperature and humidity range.

Replaceable cap for the temperature and humidity probe.

The probe can be interchanged without requiring calibration for a specific device, and this interchangeability is independent of the probe cable length. The device is designed to automatically read the current calibration data from any connected probe.