

HTK 220 Dew Point Sensor



Very fast response time

Ensures safe and reliable measurements

The dew point sensor HTK 220 provides long term stable and reliable dew point measurements at very low dew points in industrial applications.

Mode of operation

The sensor technology used in the sensor is developed especially for the HTK 220 and offers superior measurement signals at very low moisture applications, allowing reliable measurements down to -100°C .

The included sinter cap protects the sensor from dust and other particles, this ensures a stable measurement and low maintenance at the same time.

The measured sensor data is transmitted via different signals. Depending on the selected model multiple measurement values, like dew point and pressure can be output at the same time.

The various analog output options or digital Modbus outputs make the HTK 220 the perfect dew point sensor to fit into any low moisture application.

Benefits

- Small size makes it ideal for dryer installations
- Measures dew points down to -100°C Td
- Version with integrated pressure measurement
- Various output versions available: 1 x 4 ... 20 mA, 2 x 4 ... 20 mA, RS-485 (Modbus), 4 ... 20 mA loop powered

- IP65 casing provides robust protection in rough industrial environment
- Can be installed directly into dryers through G 1/2" thread
- High accuracy of $\pm 2^{\circ}\text{C}$ dew point
- M12 connector

Sensor Technology

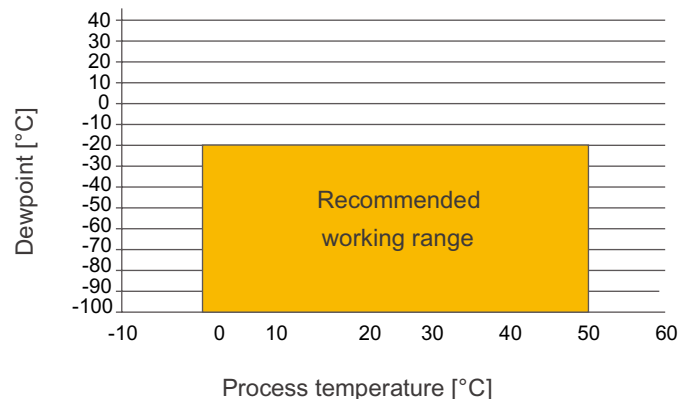
The innovative QCM Sensor Technology measures moisture changes in parts per billion range.

Stated accuracy under following conditions:

- Ambient temperature $23^{\circ}\text{C} \pm 3^{\circ}\text{C}$
- Process temperature $23^{\circ}\text{C} \pm 3^{\circ}\text{C}$
- Ambient humidity < 95%, no condensation
- Airflow > 2 l/min at sensor tip



Recommended working range



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We control GASES - since 1978



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Analysers from HTK

We are your partner for tailor-made gas analysis technology

The use of fixed and mobile gas analysers is widespread in many industries, and the demand continues to grow.

HTK Hamburg develops and builds equipment to provide effective solutions, from the small manual analyser up to the complex analysis unit in the food sector, welding & cutting and in many other industries.

Planning, manufacturing, service and calibrating analysers for the measuring gases such as O₂, CO₂, H₂, SF₆ - and many more - isn't a challenge for us; it's our mission each and every day.

Our aim is to ensure safe, consistent and accurate analysis in your process - thus maintaining quality.



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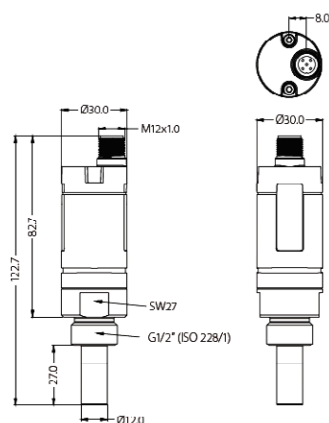
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Technical Data

Measurement range	Dew point -100 ... 0°C Td Temperature -30 ... +70°C Pressure -0.1 ... 1.6 MPa
Dew point sensor	QCM
Temperature sensor	Pt100
Pressure sensor	Piezo resistive type
Accuracy	Dew point ±2°C Td Temperature 0.3°C Pressure 0.05 bar
Operating Pressure	-0.1 ... 1.6 MPa
Operating Temperature (Medium)	-30 ... +70°C
Measured gases (Medium)	Non-corrosive gases
Response Time t90 (@ 4 l/min)	-80°C Td -> -20°C Td = 20 sec -20°C Td -> -80°C Td = 180 sec
Ambient Temperature	0 ... +50°C
Ambient Humidity	0 ... 100% rH
Supply Voltage	12 ... 30 VDC
Current consumption (model dep.)	30 mA @ 24 VDC 3-Wire/ 20 mA @ 24 VDC 2-Wire
Output signals (model depending)	4 ... 20 mA 3-Wire 4 ... 20 mA 2-Wire Modbus/RTU
Electrical connection	M12, 5-poles
Process connection	G 1/2" thread (ISO 228/1)/ Stainless steel 1.4301 (SUS 304)
Casing material	Zinc alloy
Classification	IP65
EMC	IEC 61326-1
Approval	-
Sensor protection	Sinter filter
Transport Temperature	-30 ... +70°C
Storage Temperature	-20 ... +50°C
Weight	204 g

Dimension Drawing



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