

S217 OEM

Compact Dew Point Transmitter



COMPACT DESIGN

Makes it easy to fit into the application



PRECISE MEASUREMENT

Long lasting sensor accuracy



IO-LINK OPTION

Intelligent Communication Plug and Play



DEW POINT

In the range you need it



OEM SENSOR

Cost effective version



Benefits

- ✔ Small size makes it ideal for dryer installations
- ✔ Measures dew point down to $-60\text{ }^{\circ}\text{C Td}$
- ✔ Output signals which fit your needs: 4 ... 20 mA 2-wire or 3-wire, Modbus/RTU, IO-Link
- ✔ IP65 casing provides robust protection
- ✔ High accuracy of 1 ... 2 $^{\circ}\text{C Td}$
- ✔ Sensor withstand condensation
- ✔ M8 connection cable included or optional with M12 connector

Long term stable measurements

The SUTO dew point transmitter S217 OEM provides reliable and long-term stable dew point monitoring in demanding industrial applications. The newly developed sensor features improved signal and stability.

The measured dew point is output via the loop-powered 4 ... 20 mA signal, 3-wire 4 ... 20 mA output or through Modbus/RTU. Sensor parameters, such as analogue output scaling or physical units, can be set ex factory.

Small and compact design

Through our new sensor technology paired with a compact casing, S217 OEM can be offered at very attractive prices. This allows applications in smaller dryers and point of use dryers using a more energy-efficient dew point control.

Designed for demanding OEM applications



1 The S217 OEM Dew Point Transmitters help a CNC-Grinding Machine Manufacturer to keep their product and process at the highest levels of quality

Since not all customers monitor their air quality, a CNC Manufacturer contacted SUTO to find a way to monitor the incoming air quality and notify the customer when it is outside the specification.

SUTO worked with them to design in a Dew Point Monitoring System at the compressed air inlet on their CNC grinding machines.

With the S217 OEM the Dew Point Monitoring System constantly measures the humidity levels of the compressed air and has two predetermined alarms set by the CNC manufacturer and provides reliable processes.



2 A build in S217 OEM Dew Point Transmitter helped to prevent condensation in a silo trailer and thus the growth of bacteria or germs

The silo trailer was equipped with a high-quality air dryer to improve the air quality in the silo trailer. An essential part of the system is the measurement and storage of data on the relative humidity and the pressure dew point.

The clean, dry air that is blown into the silo and the moist air that is blown out of the silo is monitored by two S217 OEM dew point sensors connected to the SUTO S331 data logger.

By implementing SUTO's cutting-edge solution, the company was able to achieve a permanent removal of moisture from the silo trailer, which led to high efficiency and safety.

Technical Data

General Specifications

Measurement range (model depending)	Dew point	-60 ... +20 °C Td
	Temperature	-20 ... +50 °C Td -30 ... +70 °C
Dew point sensor	Polymer	
Temperature sensor	NTC	
Pressure sensor	N/A	
Accuracy	Dew point	±2 °C Td
	Temperature	0.3 °C
Operating Pressure	-0.1 ... 5.0 MPa	
Operating Temperature (Medium)	-30 ... +70 °C	
Measured gases (Medium)	Non-corrosive gases	
Response Time t90 (@ 4 l/min)	-40 °C Td -> -20 °C Td = 20 sec 0 °C Td -> -40 °C Td = 120 sec	
Ambient Temperature	-20 ... +50 °C	
Ambient Humidity	0 ... 100 %rH	
Supply Voltage	12 ... 30 VDC	

Stated accuracy under following conditions:

- Ambient temperature 23 °C ±3 °C
- Process temperature 23 °C ±3 °C
- Ambient humidity < 95 %, no condensation

Current consumption (model depending)	30 mA @ 24 VDC 3-Wire, Modbus/RTU
	20 mA @ 24 VDC 2-Wire
Output signals (model depending)	4 ... 20 mA 3-Wire
	4 ... 20 mA 2-Wire
	Modbus/RTU IO-Link (please inquire)
Electrical connection	Cable, 1.8 m, open end wire, M8 connector, 4 poles
Process connection	G 1/2" thread (ISO 228/1) Stainless steel 1.4301 (SUS 304)
Casing material	Aluminum alloy
Classification	IP65
EMC	IEC 61326-1
Approval	-
Sensor protection	Sinter filter
Transport Temperature	-30 ... +70 °C
Storage Temperature	-20 ... +50 °C
Weight	198 g

Ordering

Please use the following table to assist in placing your order with our sales staff.

S217 OEM Compact Dew Point Transmitter

Order No. Description

S699 2176	S217-6, dew point sensor, 4 ... 20 mA (2-wire), -60 ... +20 °C Td, G 1/2" thread, 5.0 MPa, M8
S699 2173	S217-3, dew point sensor, 4 ... 20 mA (2-wire), -20 ... +50 °C Td, G 1/2" thread, 5.0 MPa, M8
S699 2177	S217-7, dew point sensor, 4 ... 20 mA (3-wire), -60 ... +20 °C Td, G 1/2" thread, 5.0 MPa, M8
S699 2174	S217-4, dew point sensor, 4 ... 20 mA (3-wire), -20 ... +50 °C Td, G 1/2" thread, 5.0 MPa, M8
S699 2178	S217-8, dew point sensor, Modbus/RTU, -60 ... +20 °C Td, G1/2" thread, 5.0 MPa, M8
S699 2179	S217-9, dew point sensor, Modbus/RTU, -20 ... +50 °C Td, G1/2" thread, 5.0 MPa, M8

Custom range

A1390	S217, customized measuring range (please specify your range and scaling request)
-------	--

High pressure option

A1391	S217, high pressure option 35 MPa (350 bar)
-------	---

Accessories

A699 3491	Measuring chamber for easy installation in compressed air system up to 15 bar
A699 3493	Measuring chamber bypass type (in and out 6 mm hose connection)



www.suto-itec.com



sales@suto-itec.com