

Dew Point Sensor

Atlas Copco Optimization

Characteristics

- Compact size makes them ideal for dryer installations.
- Optional display for on-site values.
- User friendly signal outputs to connect to process controls or monitoring systems.
- IP65 casing provides robust protection.
- Low maintenance costs due to stable and reliable measurements which increases calibration intervals.



Technical Specifications

Dew point accuracy	$\pm 1^{\circ}\text{C Td}$ (0 ... 20°C Td) $\pm 2^{\circ}\text{C Td}$ (-70 ... 0 / +20 ... +50°C Td) $\pm 3^{\circ}\text{C Td}$ (-100 ... -70°C Td)
Temperature accuracy	$\pm 0.3^{\circ}\text{C}$
Pressure accuracy	0.5% FS
Process connection	G ½" (ISO 228/1)
Weight	180g
Display options	0.66" OLED display
Sensor types	Temperature sensor PT100 Pressure sensor: Piezo resistive type
Approvals	IP65 / CE

Operating Conditions

Medium (Gases)	Air, Argon, O ₂ , N ₂ , CO ₂
Medium temperature	-30 ... +70°C
Ambient temperature	0 ... +50°C
Ambient humidity	0 ... 100% rH
Transport temperature	-30 ... +70°C
Storage temperature	-20 ... +50°C

Materials

Casing	Aluminum alloy
Process thread	Stainless Steel 1.4301 (SUS 304)
Display cover	PC + ABS
Sensor protection	Sinter filter (Stainless Steel)

Supply

Voltage supply	15 ... 30 VDC
Output signal	4... 20 mA 2-wire / SDI, 4... 20mA 3-wire / SDI, 4 ... 20 mA 3-wire + Modbus/RTU

Part Number	Name	Dew Point	Pressure Measurement	Temperature	Output
1830154911	DP T20	-20 ... +50°C	N/A	-30 ... +70°C	4-20 and Modbus RTU
1830154912	DP T20 P	-20 ... +50°C	0 ... 16 bar	-30 ... +70°C	4-20 and Modbus RTU
1830154913	DP T60	-60 ... +20°C	N/A	-30 ... +70°C	4-20 and Modbus RTU
1830154914	DP T60 P	-60 ... +20°C	0 ... 16 bar	-30 ... +70°C	4-20 and Modbus RTU
1830154915	DP T100	-100 ... +20°C	N/A	-30 ... +70°C	4-20 and Modbus RTU
1830154916	DP T100 P	-100 ... +20°C	0 ... 16 bar	-30 ... +70°C	4-20 and Modbus RTU



Display Option

The OLED Display provides onsite real time values. It can be rotated 340° to suit your application.

Robust Materials

The main body is made from aluminum alloy, while the process connection is crafted from durable 1.4301 SS for long-lasting reliability. The top cover and optional display cover are made of robust polycarbonate with ABS, ensuring resistance to harsh environmental conditions.

Advanced Measuring Technology

The sensor is specifically designed for low dew point applications where conventional sensor types often fall short. By combining QCM technology with a proven polymer sensor, it delivers precise measurements across the full range, from -100°C Td to +20°C Td, by automatically switching between the two sensing elements.