

Dew Point Sensor – Mini Series

Compact, affordable dew point sensor

Features:

- Dew Point Range:
 -60°C to +60°C
 (-76°F to +140°F)
- Accuracy +/- 2°C
- Gas systems up to 4 Mpa (600psi)
- Up to three output signals
 - (i) Pressure Dew Point
 - (ii) Relative Humidity
 - (iii) Temperature and
- Two outputs as standard
 (i) Digital Modbus and
 (ii) Analog 4-20mA
- Fast response time
- Includes Measuring Chamber, M8 connector and data cable
- IP65 rated
- Long term stability
- Anti-condensation, antiparticulate pollution, oil vapour and most chemicals
- Options

 (i) Aluminium or Stainless
 Steel casing
 - (ii) Multiple Gas options



Aluminium Casina

This compact dew point sensor is perfectly suited for compressed air and inert gas systems up to 4 Mpa (600psi) with refrigerant or desiccant dryers.

With its precision polymer technology and strong contamination resistance, sensor calibration can be performed every 2 years¹. The fast response time ensures an accurate and up to date reading, giving you peace of mind that your system is under control.

¹ Provided sensor not exposed to relative humidity above 85%

More information: www.compressedairalliance.com/products

Benefits of dew point monitoring:

- Improve system reliability
- Reduce product contamination risks
- Reduce system maintenance
- Reduce operating and energy costs
- Improve dryer reliability
- Improve filter life and performance
- Reduce risk of rust and corrosion build up
- Reduce risk of bacteria, fungus and yeast build up
- Be aware of changes in dryer performance before moisture appears in your plant





Specifications

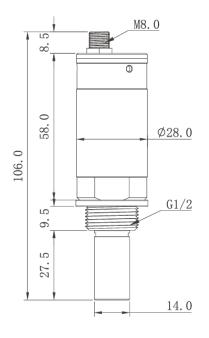
Sensor		
Sensor Technology	Polymer sensor	
Sensor Filter	Stainless steel mesh filter (filter grade 40-50 um)	
Contact us for other filter options		
Measurement Range		
Pressure Dew Point Range	-60 to +60°C -76°F to +140°F	
Gas Temperature Measureme Range	-40 to +100 °C -40 to +212°F	
Accuracy		
Dew Point Accuracy	±2%	
Temperature Accuracy • 0 to + 50°C • -40 to 0°C and +50 to +10	±0.3°C 00°C ±0.5°C	
Dew Point Measurement Response Time		
-50 to +20 °Ctd	20 sec [40 sec]	
+20 to -50 °Ctd	1 min [3 min]	
Reference Conditions: 63% [90%], 20 °C, 1bar(a), 4L/min		
Power Supply		
Power Requirement	10 30 VDC Max 50 mA @ 24 V	
Electromagnetic Compatibility	y Meets IEC 61326-1	

Output		
Outputs	4-20 mA (3 wire) Modbus RTU (RS485)	
Current Output Resolution	0.002 mA	
Current Output Temperature Drift	0.01% of span/°C	
Current Output Load	Max 500 ohm	
Connector	1 x 5 pin M8, female	
Working Environment		
Operating Temperature	-30 to +70°C -22 to +158°F	
Pressure	0 to 50 bar	
Relative Humidity	0 to 95% RH	
Minimum gas flow	> 1L /min	
Other		
Process Connection	G1/2" thread	
Contact us for UNF process connection		
IP Rating	IP65	
Casing	Aluminium, or Stainless Steel	
Dimensions	106 mm x 28 mm 4.2" x 1.1"	



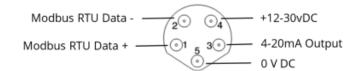


Dimensions (mm)



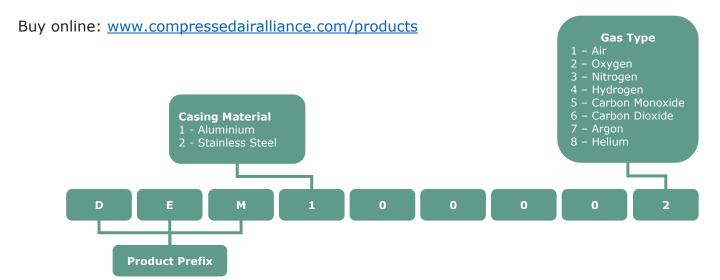
Wiring

M8 connector (5 pin)



Connector	
Pin 1	RS485, Data + (A)
Pin 2	RS485, Data - (B)
Pin 3	4-20mA Output
Pin 4	+12-30vDC
Pin 5	0vDC (Ground for Modbus)

How to Order







Other Dew Point Sensors



W Series Dew Point Sensor

Wall mount dew point monitor. Ideal for applications that require a large display or visual alarm

Pressure Dew Point Range

-110°C to +60°C (-166°F to +140°F)

Gas Contamination

Minimal to moderate contamination

Outputs

None. Stand alone unit

Technology

Quartz, Alumina-Oxide or Polymer sensor (depending on dew point range)

Options

Integrated pressure sensor

Power Plug (USA, Euro, UK or Australian plug)

Q Series Dew Point Sensor

"Top of the range" sensor

Pressure Dew Point Range

-110°C to +0°C (-166°F to +32°F)

Gas Contamination

High purity gases. Little to no contamination

Outputs

Modbus & 4-20mA

Technology

Quartz sensor technology

Options

Integrated pressure sensor, in-built display,

data cable



A Series Dew Point Sensor

Mid-range sensor

Pressure Dew Point Range

-100°C to +20°C (-148°F to +68°F)

Gas Contamination

Minimal contamination

Outputs

Modbus & 4-20mA

Technology

Alumina-Oxide sensor

Options

Integrated pressure sensor, in-built display,

data cable

K Series Dew Point Sensor

Robust sensor, suitable for harsh conditions

Pressure Dew Point Range

-60°C to +60°C (-76°F to +140°F)

Gas Contamination

Moderate levels of contamination

Outputs

Modbus & 4-20mA

Technology

Polymer sensor

Options

Integrated pressure sensor, in-built display,

data cable



P Series Dew Point Meter

Portable dew point meter. Ideal for temporary

Pressure Dew Point Range

-110°C to +60°C (-166°F to +140°F)

Gas Contamination

Minimal to moderate contamination

Outputs

None. Stand alone unit

Technology

Quartz, Alumina-Oxide or Polymer sensor (depending on dew point range)

Options

Integrated pressure sensor

Power Plug (USA, Euro, UK or Australian plug)

