

Dew Point Sensor – A Series

For refrigerant or desiccant dryers, or nitrogen systems
DEA Series

Key Features

- Dew Point Range:
 - -120°C to +20°C | -184°F to +68°F or
 - -110°C to +20°C | -166°F to +68°F or
 - -80°C to +20°C | -112 to +68°F
- IP65 rating
- Accuracy:
 - +/- 2°C for dew points between +20 to -80°C
 - +/- 3°C for dew points between -80 to -120°C
- Power Supply: 10 ... 30 VDC
- Output:
 - Digital - Modbus and
 - Analog - 4-20mA
- Measure:
 - Pressure Dew Point (PDP), Relative Humidity (RH) and Temperature.
 - Optional: Pressure (standard and display models only)
- Alarm relay – only available on the 'Dew Point Sensor with Display'



Mini

Standard

With Display

About

This precision dew point sensor is ideal for compressed air and inert gas systems up to 4 Mpa (600psi). The optional integrated pressure sensor makes measuring simpler and easier to manage, reducing wiring and installation costs.

The alumina sensor is suited to dew points down to -110°C (-166°F). It has excellent accuracy, response speed, long-term stability and anti-pollution ability.

The innovative temperature compensation algorithm and multi-point temperature compensation calibration reduced sensor drift, ensuring high-accuracy measurements over a wide temperature range.

Applications

- Manufacturing and industrial use
- Gas systems up to 4 Mpa (600psi)
- Permanent or temporary measurement
- Gas pressure up to 50 bar (725 psi)



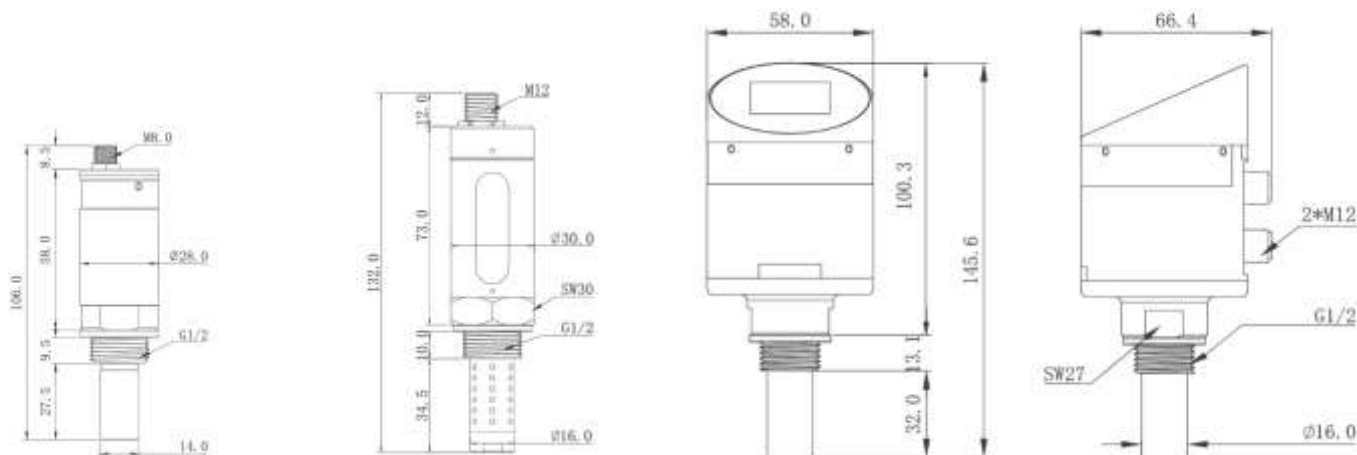
More Info

Specifications

Sensor	
Sensor Technology	Alumina sensor
Sensor Filter	Stainless steel mesh filter (filter level 70 um)
Contact us for other filter options	
Measurement Range	
Pressure Dew Point Range	-80 to +20 °C (-112 to +68°F) -110 to +20°C (-166 to +68°F) -120 to +20°C (-184to +68°F)
Gas Temperature Measurement Range	-40 to +100 °C -40 to +212°F
Pressure Measurement Range	- with pressure sensor 0 to 17 bar - without pressure sensor 0 to 50 bar
Accuracy	
Dew Point Accuracy	+20 to -80°C ±2% -80 to -120°C ±3%
Temperature Accuracy	0 to + 50°C ±0.3°C -40 to 0°C and +50 to +100°C ±0.5°C
Pressure Accuracy (@23°C)	±0.3% F.S
Pressure changes with temperature	±0.01 bar / 10°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	
Working Environment	
Operating Temperature	-30 to +70°C -22 to +158°F
Relative Humidity	0 to 95% RH
Minimum gas flow	> 1L /min

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
Alarm Relay Output	- Mini Dew Point Sensor Not available - Standard Dew Point Sensor Not available - Sensor with Display Normally open 32 VDC/500 mA
Connector	- Mini Dew Point Sensor 1 x 5 pin M8, female - Standard Dew Point Sensor 1 x 5 pin M12, female - Sensor with Display 2 x 5 pin M12, female
Power Supply	
Power Requirement	- Mini Dew Point & Standard Dew Point Sensor 10 ... 30 VDC Max 50 mA @ 24 V - Sensor with Display 16 ... 30 VDC Max 150 mA @ 24 V
Electromagnetic Compatibility	Meets IEC 61326-1
Other	
Process Connection	G1/2" thread
IP Rating	IP65
Casing	- Mini Dew Point Sensor Stainless Steel - Standard Dew Point Sensor Stainless Steel - Sensor with Display Anodised Aluminium
Display	- Mini Dew Point Sensor NA - Standard Dew Point Sensor NA - Sensor with Display 1.5" touch screen
HS Code	9025.80.00

Dimensions



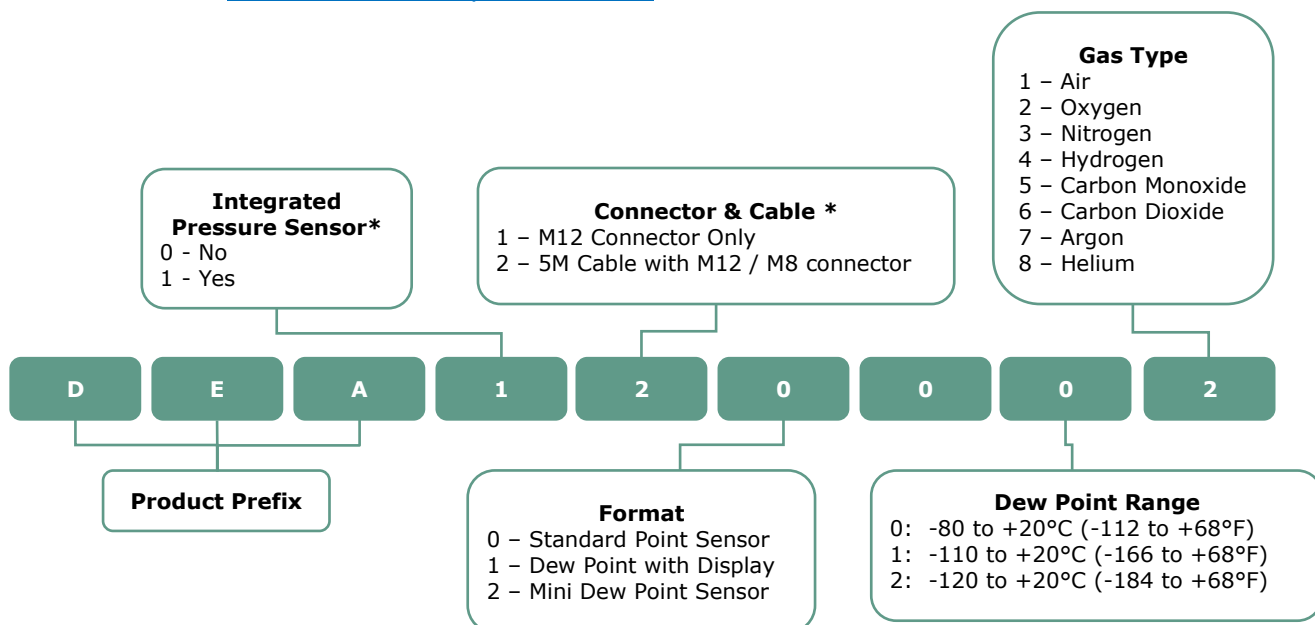
Mini Dew Point Sensor

Standard Dew Point Sensor
(no display)

Dew Point Sensor with Display

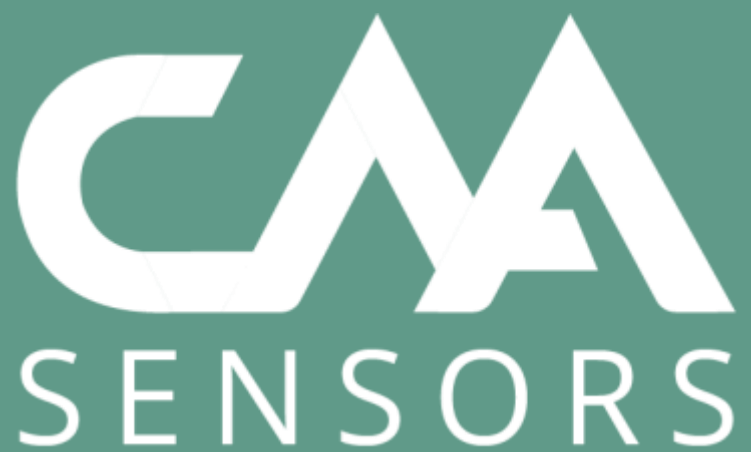
How to Order

Find a Distributor: www.caasensors.com/distributors



* Notes

- Mini Dew Point Sensor does not have an integrated pressure
- Mini Dew Point Sensor only comes with 5m cable with M8 connector



CAA Sensors Pty Ltd

Head Office: Sydney, Australia

Email: sales@caasensors.com

Website: www.caasensors.com

Find a Distributor: www.caasensors.com/distributors