

# Dew Point Sensor - Outdoor

IP67 rating

## Key Features

- IP67 rating
- Dew Point Range:
  - -60°C to +60°C | -76°F to +140°F
  - -110°C to +20°C | -166°F to +68°F
- Accuracy: up to  $\pm 2\%$
- 2.0" IPS LCD display with an ultra-wide viewing angle
- Power Supply: 16 to 30 vDC
- Two outputs as standard:
  - Digital - Modbus RTU
  - Analog - 4...20 mA
- Powder-coated Aluminium housing
- Measure: Pressure Dew Point Relative Humidity, Temperature, Pressure (optional)



## About

This dew point sensor is ideal for use in outdoor or harsh indoor environments. The optional integrated pressure sensor makes measuring simpler and easier to manage, reducing wiring and installation costs.

All of Compressed Air Alliance's dew point sensors have 10 + dewpoint calibration and multi-point temperature compensation.

The auto-calibration circuit design automatically compensates for measuring drift caused by temperature, contamination, and aging, thus providing long-term stability and high accuracy measurements.

## Applications

- Manufacturing and industrial use
- Clean, dry compressed air and inert gases
- Temporary or permanent installation
- Outdoor environments
- Gas pressure up to 50 bar (725 psi)
- Install on pressurised pipes



# Specifications

Measurement Range		
Pressure Dew Point Range		
Option 1	-60°C to +60°C -76°F to +140°F	Polymer sensor
Option 2	-110°C to +20°C -166°F to +68°F	Alumina-Oxide Sensor
Gas Temperature	-40 to +100°C -40 to +212°F	
Gas Pressure (optional)	0 to 17 bar 0 to 246 psi	

Accuracy	
Dew Point Accuracy	
• +20 to -60°C	±2%
• -60 to -100°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
The accuracy and response time of the sensor can be affected by the on-site conditions, contaminants in the gas and incorrect installation.	

Dew Point 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	16 to 30V DC/ 4.5W @ 24V
Electrical Connection	Terminal Strip
Electromagnetic Compatibility	Meets IEC 61326-1

Display	
Display	2.0" IPS ultra-wide viewing angle LCD screen with capacitive touch

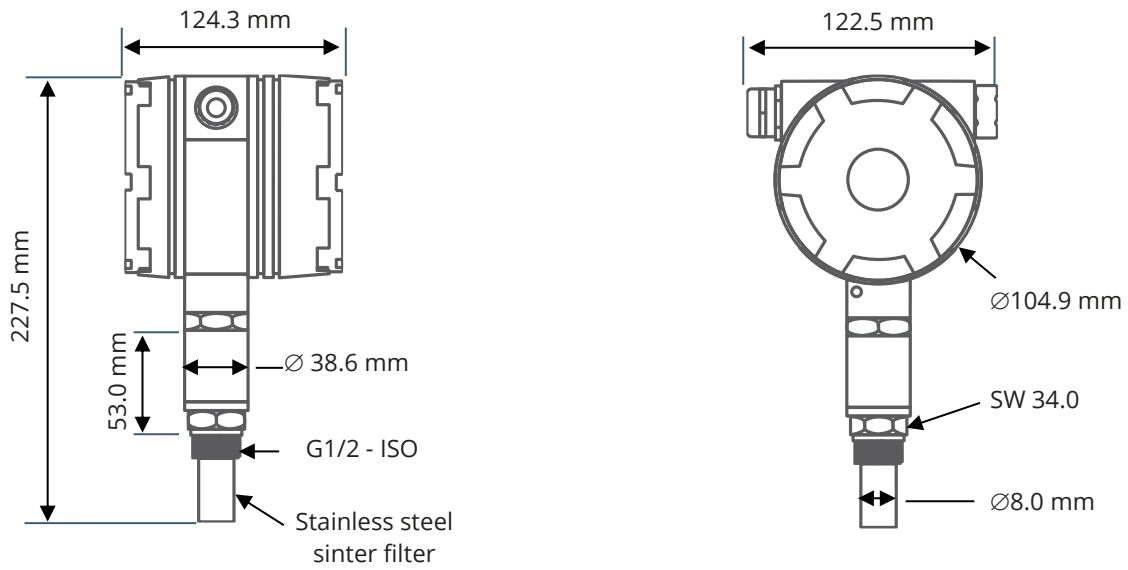
Output	
Analogue Output	4-20 mA
Digital Output	Modbus RTU (RS485)
Output Signals	Pressure Dew Point, Relative Humidity, Temperature, Pressure (optional)
Current Output Resolution	0.002 mA
Current Output Temperature Drift	0.01% of span/°C
Current Output Load	Max 500 ohm
Alarm Relay Output	Normally open 32 VDC/500 mA

Working Environment	
Ambient Temperature	-30 to +70°C -22 to +158°F
Gas types	Compressed air, nitrogen, oxygen, carbon dioxide and other non-condensable gases
Minimum Gas Flow	>1L/min
Gas Pressure	<ul style="list-style-type: none"> <li>• With pressure sensor 0 to 17 bar (246 psi)</li> <li>• Without pressure sensor 0 to 50 bar (725 psi)</li> </ul>

Other	
Process Connection	ISO G1/2" thread
IP Rating	IP67
Housing Material	Stainless Steel SUS304 + Powder-coated Aluminium
Sensor Filter	Stainless steel mesh filter (filter grade 30-45 um)
Weight	1.7 kg
Installation	Permanent or Temporary
Calibration	Every 2 years
Annual calibration is required if the sensor is exposed to relative humidity above 85%.	
Warranty	12 months

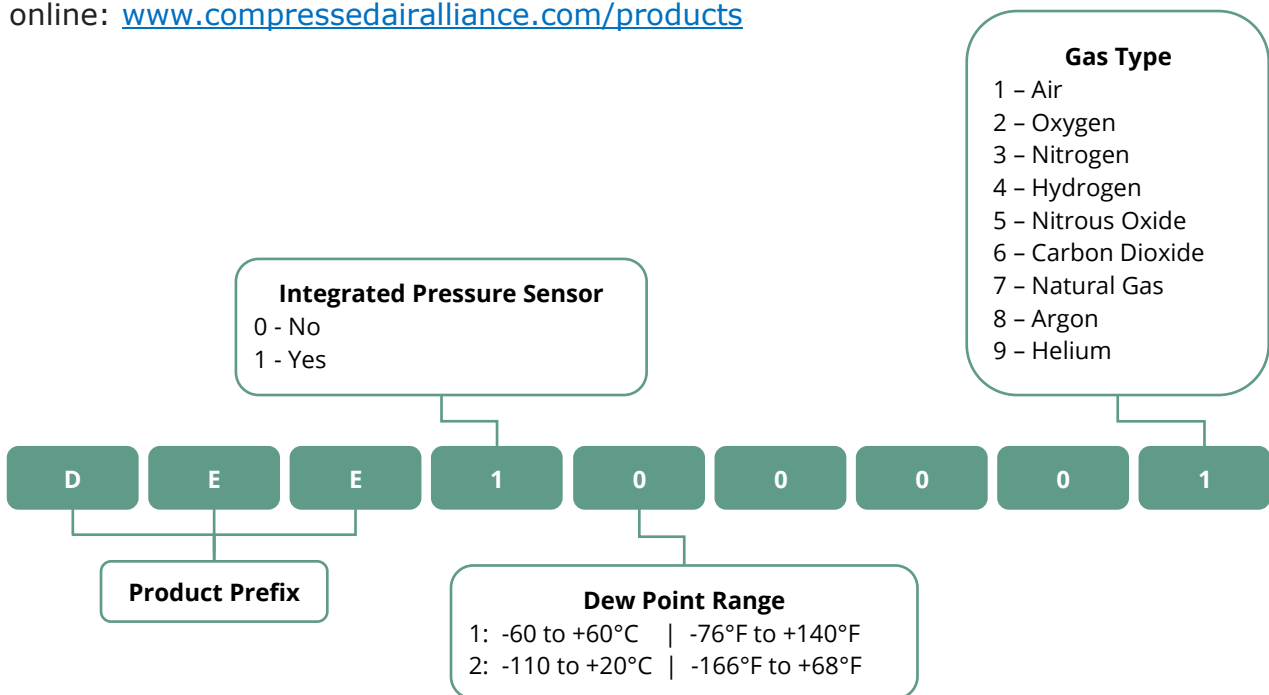


# Dimensions



# How to Order

Buy online: [www.compressedairalliance.com/products](http://www.compressedairalliance.com/products)



## Other Dew Point Sensors

---



### W Series Dew Point Sensor

Wall mount dew point monitor. Comes with a large display and alarm (red/green light, siren)

#### Pressure Dew Point Range

-110°C to +20°C (-166°F to +68°F) or

-80°C to +20°C (-112°F to +68°F) or

-60°C to +60°C (-76°F to +140°F)

#### Gas Contamination

Minimal to moderate contamination

#### Outputs

None. Stand alone unit

#### Technology

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

#### Options

Integrated pressure sensor

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



### A Series Dew Point Sensor

Ideal for very low dew points

#### Pressure Dew Point Range

-110°C to +20°C (-166 °F to +68°F) or

-80°C to +20°C (-112°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



### Mini Dew Point Sensor

Entry level sensor. Compact design. Can be used in small spaces

#### 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

Stainless Steel or Aluminium casing

Note: No integrated pressure or in-built display option available



### H Series Dew Point Meter

Portable / Handheld dew point meter. Ideal for temporary measurement

#### Pressure Dew Point Range

-110°C to +20°C (-166°F to +68°F)

-60°C to +60°C (-76°F to +140°F)

#### Gas Contamination

Minimal to moderate contamination

#### Outputs

None. Stand alone unit

#### Technology

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

#### Options

None – comes with integrated pressure sensor and measurement chamber