



D2

Two Stage Chilled Mirror Sensor

The Model D-2 is a general purpose, 2-stage sensor with 65°C (117°F) of depression capability. It features wetted parts of stainless steel and glass, for durability in demanding industrial applications. The Model D-2 can be used as a benchtop sensor, mounted to a heat sink, or mounted to a cooling fan, if desired, for maximum operating range. Advanced features include field-replaceable optics and cooler assemblies, and auxiliary, visible light optics with viewing window for inspecting the mirror during operation.

FEATURES:

- Primary, fundamental measurement of dew/frost point.
- Hermetically-sealed, wire-wound 4-wire PRT
- NIST traceability
- Interchangeable with other General Eastern sensors without recalibration
- Continuous, on-line measurement
- Infrared optics
- Auxiliary, visible light optics and viewing window for critical work
- Field-replaceable mirror, optics, and cooler assemblies
- 65°C (117°F) depression capability
- Wetted parts of corrosion-resistant materials
- Flip-top lid with latch for easy access

SPECIFICATIONS:

Sensing Element: 1/3 Class A DIN 43760 PRT, 100 ohm @ 0°C (32°F)

Dew/Frost Point Accuracy

Standard: ±0.2°C (±0.36°F)

Optional: ±0.15°C (±0.27°F)

Sensitivity: > 0.03°C (0.05°F)

Repeatability: ±0.05°C (±0.09°F)

Hysteresis: None

Cooling Stages: 2

Depression @ 25°C, 1 atm, air): 65°C (117°F)

Typical Meas. Range, 25°C (77°F), 1 atm, air):

Dew/Frost Point: -35° to +25°C (-31° to +77°F)

Relative Humidity: equivalent to 1.5% to 100%

Required Sample Flow: 0.5 to 5.0 scfh (0.25 to 2.5 L/min)

FUNCTIONAL:

Power: From electronics

Operating Ranges:

Ambient Temperature: -25° to +85°C (-13° to +185°F), consult factory for higher temperature requirements

Pressure: -14.7 to 185 psig (0 to 11 bar)

Auxiliary Cooling: Not available

PHYSICAL:

Sensor Body Material: Stainless Steel

Sensor Wetted Material: 302, 316SS, Silicone O-ring, BK-7 glass, rhodium or platinum mirror

Weight: 1.8 kg. (4 lb.)

Shipping Weight: 3.2 kg. (7 lb.)

ACCESSORIES:

HEX-3, rhodium-plated mirror

HEX-4, solid platinum mirror

TW-1, mirror torque wrench

D-2K, sensor cable (10 ft (3 m) standard), up to 300 ft (91 m) available

OP-D2 optics module

CB-D2 cooler module

VB-D2 vapor barrier



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