



1311-XR

Five Stage Chilled Mirror Sensor

The Model 1311XR is General Eastern's top of the line, 5-stage sensor designed to measure ultra-low frost points. It provides an impressive 112°C (202°F) of depression capability, enabling measurements in the <500 ppb range. The Model 1311XR, mated with the Model M3 electronics, provides a state of the art, ultra-low frost point measurement at a cost-effective price.

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
- Field-replaceable mirror
- 112°C (202°F) depression capability
- Liquid Cooling

SPECIFICATIONS:

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

Dew/Frost Point Accuracy - Standard: ±0.15°C (±0.27°F)

Sensitivity: > 0.03°C (0.05°F)

Repeatability: ±0.05°C (±0.09°C)

Hysteresis: None

Cooling Stages: 5

Depression @ 25°, 1 atm, air: 112°C (202°F)

Typical Meas. Range with 15°C (59°F) cooling water, at 25°C (77°F), 1 atm, air:

Dew/Frost Point: -80° to +15°C (-112° to +59°F)

Relative Humidity: equivalent to 0.0003% to 100%

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

FUNCTIONAL:

Power: 115/230 VAC, 50-60 Hz, 700 watts max.

Operating Ranges:

Ambient Temperature: 0° to +35°F (+32° to +95°F)

Pressure: 0 to 100 psig (1 to 8 bar)

Auxiliary Cooling: Water cooling (standard)

PHYSICAL:

Sensor Body Material: Stainless steel

Sensor Wetter Material: 316SS, copper, mylar, silicone, rhodium or platinum mirror

Inlet/Outlet Fittings: 1/4" compression, 6 mm available

Water Fitting: 3/8" compression

Weight: 23 kg. (50 lb.)

Shipping Weight: 26 kg. (58 lb.)

ACCESSORIES:

HEX-1, rhodium plated mirror (standard)

HEX-2, solid platinum mirror

TW-1, mirror torque wrench

1123XRK, sensor cable (10 ft (3 m) standard, up to 300 ft (91 m) available)



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