

DPS3

Heated Dew Point System



Model DPS3 is a heated dew point hygrometer that can measure dew points up to 95°C (203°F) and as low as -35°C (-31°F). This integrated system includes a microprocessor based electronics, a chilled mirror dew point sensor, a sample flow meter/valve, a 3 foot heated sample line, assorted tubing and fittings; all contained in a heated, temperature controlled NEMA-4 enclosure.

The heated sensor allows the measurement of high dew points that are above ambient temperature. Without the heated system condensation would occur and measurements could not be taken.

APPLICATIONS

- ▶ Fuel Cell Testing
- ▶ Industrial
- ▶ Furnace

The two-stage chilled mirror dew point sensor in the DPS3 provides an accurate and fundamental measurement of the dew point of the sample gas.

SPECIFICATIONS

DPS3 STANDARD FEATURES

- ▶ Heated Sensor Temperature Range: 20 to 99°C (68 to 210°F)
- ▶ Dew Point Measurement Range: -35 to 95°C (-31 to 203°F)
- ▶ Measurement Accuracy: $\pm 0.2^{\circ}\text{C}$ ($\pm 0.4^{\circ}\text{F}$)
- ▶ Microprocessor Controlled
- ▶ Dew Point, Set Point Temperature and Actual Temperature Displays
- ▶ User Programmable Temperature Controller
- ▶ Automatic Balance Control
- ▶ Integral Adjustable Flowmeter
- ▶ Two Available Alarm Relays
- ▶ Selectable 4 to 20mA, 0 to 5VDC or 0 to 10 VDC Analog Outputs
- ▶ RS232 Output
- ▶ Sample Connection: 1/4 inch Compression Fitting
- ▶ Sample Pressure: Up to 150psig
- ▶ 3 foot Heated Hose Supplied
- ▶ AC Power: 100 to 240VAC, 50/60Hz, 250 Watts

FUNCTIONALITY

Mirror Material

Standard: Chrome

Optional: Platinum

Pressure Rating: 200psi

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

Repeatability: $\pm 0.05^{\circ}\text{C}$ (0.9°F)

OPTIONS

PT Pressure Transducer Kit, Live Pressure

SA.1 Enhanced Dew Point Accuracy,
0.1°C traceable to NIST

PHYSICAL

Dimensions: 14 x 12 x 11 inches
(35.6 x 30.5 x 28 cm)

Weight: 27 lbs (14.5 kg)

Mounting: Wall Mounted NEMA 4 Enclosure

