



ohmic instruments co.

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INDUSTRIAL & ENVIRONMENTAL SENSORS, INSTRUMENTS & CONTROLS SINCE 1969

DEW POINT MONITOR KIT MODEL DPSC-35XR
MEASURE THE PERFORMANCE OF PROCESS & COMPRESSED AIR DRYERS

- **EQUIPPED WITH MICROPROCESSOR BASED CIRCUIT CARD, REMOTE PROBE & LCD DISPLAY WITH BEZEL**
- **PROBE WITH 1/2" SS NPT FITTING INSTALLS IN PROCESS AIR UP TO 175 PSIG & 200°F**
- **RANGE: -40 TO +80°F DEW/FROST POINT**
± 4°F FROM -40 TO +20°F
± 2°F FROM +20 TO +80°F
- **LINEAR 4-20mA & 0-5V OUTPUTS**
- **RS-232 INTERFACE**
- **0.5A DPDT ALARM/CONTROL RELAY OUTPUT**
- **FULLY TEMPERATURE COMPENSATED**
- **CALIBRATED TO NIST STANDARDS**



DPSC-35XR kit consists of a microprocessor based PC card, remote probe with 6Ft cable, and LCD display with bezel. The kits may be installed in dryer panels or electrical enclosures.

INSTALL DEW POINT MONITORS AT ECONOMICAL COSTS

OHMIC's DPSC-35XR kits are ideal for the OEM who has requirements to monitor the performance of desiccant or refrigerated air dryers used in plastics manufacturing, breathing air, pneumatic systems, and industrial gas applications.

Straight forward installation in electrical panels results in the DPSC-35XR kit being an economical alternative to other hygrometers. The kit is equipped with a remote probe, microprocessor based PC card, and 3-1/2 digit LCD with bezel. Analog outputs, an RS-232 interface, and alarm/control contacts are standard. The remote probe may be installed in a manifold for plastics hopper dryers or directly in compressed airlines up to 175 PSI.

The probe measures both the amount of water vapor and the dry bulb temperature in the air sample. The

DPSC-35XR's microprocessor computes dew/frost point directly from the signals produced by the probe by utilizing psychrometric equations. Analog outputs (0-5 Vdc and 4- 20 mA) and RS-232 interface can be used by recorders, data acquisition systems and PLCs to control and document dryer performance. The alarm/control relay may be set to signal when dew point conditions exceed unacceptable levels or used as a logic signal for desiccant regeneration and refrigerant compressor control.

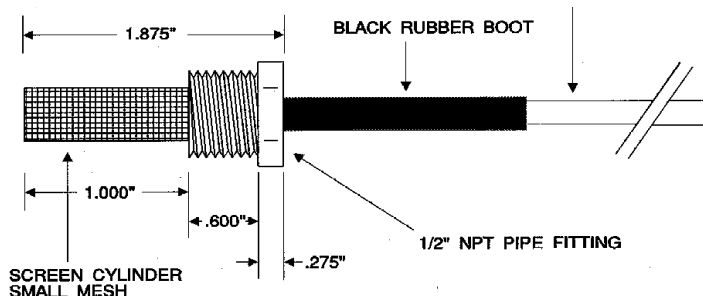
Unlike other dew point meters which measure %RH transposed to dew point at a given temperature, the DPSC-35XR is fully temperature compensated, providing the accuracy and repeatability found only in hygrometers costing several thousand dollars. Each DPSC-35XR is calibrated to NIST Traceable dew/frost point standards.

WARRANTY: All products manufactured by OHMIC Co. are warranted to be free of defects in material and workmanship for one year after delivery. Any equipment found to be defective within this period will be repaired or replaced free of charge.

SPECIFICATIONS: DPSC-35XR

Water Vapor Sensor	HC-610 (Integrated Thin Film Polymer)
Temperature Sensor	10K NTC Thermistor
Dew/Frost Point Range	-40 to +80°F
Temperature Range	0 to +185°F
Dew/Frost Point Accuracy	± 4°F From -40 °F to +20 °F, ± 2°F From +20 °F to +80 °F
Dry Bulb Accuracy	± 1° F
Maximum Temperature	Probe: 185°F (optional cooling coil & manifold enables air to 550°F to be sampled) Electronics: 120°F
Maximum Pressure	175 PSIG
Sensor Response Time	10 seconds for 63% Step Change
Display Type	3-1/2 Digit LCD; 0.5"
Analog Outputs	0- 5 Vdc & 4- 20 mA
Relay Outputs	0.5 Amp DPDT Relay (may be wired for latching operation with manual reset)
Power	120 Vac, 50-60 Hz
Computer Interface	Bi-directional RS-232. Data in ASCII, Comma Delimited Format. 9600 Baud, 8 Bits, 1 Stop, 1 Start, No Parity
Dimensions	Circuit Card: 4.25" x 6.00" x 1.88" (H x W x D).

PDPS-610TH Remote Probe



The RS-232 interface provides delimited ASCII data transmission of *Dew/Frost Point* and *Dry Bulb Temperature*. A built in menu allows the transmission interval to be set with a few simple keystrokes. Any terminal program such as *Procomm* or *Windows HyperTerminal* may be used to view and collect the data. The data may be saved as a text file which can be exported to spreadsheets, databases, wordprocessors and other application programs.

ORDERING INFORMATION

DPSC-35XR: Dew Point Monitor Kit, Includes PC Card, Display w/ Bezel, and PDPS-610TH Probe.

ENGINEERING SUPPORT: OHMIC Instruments Co. designs and manufactures a full line of environmental and bio-medical sensors, instruments and controls. Many of our products are custom designed to meet specific requirements. Our engineers will be pleased to discuss your application.



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