



ohmic instruments co.

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INDUSTRIAL & ENVIRONMENTAL SENSORS, INSTRUMENTS & CONTROLS SINCE 1969

**DEW POINT MONITOR - DPM-35XR
PORTABLE METER FOR PLASTIC & COMPRESSED AIR DRYERS**

- MICROPROCESSOR BASED METER DISPLAYS DEW/FROST POINT FROM -40 TO +80°F
- ±4°F ACCURACY FROM -40 TO +20°F
- ±2°F ACCURACY FROM +20 TO +80°F
- EQUIPPED WITH INTEGRAL VACUUM PUMP FOR SAMPLING FROM HOPPERS, OVENS & CHAMBERS
- COOLING COIL ENABLES SAMPLING FROM HOT AIR DRYERS TO 550°F
- SELECTOR SWITCH FOR PRESSURE DEW/FROST POINT READINGS TO 125 PSIG
- RED/GREEN ALARM LIGHTS AND AUDIBLE ALARM INDICATE WHEN MOISTURE LEVELS EXCEED ACCEPTABLE LIMITS
- 4-20 mA & 0-5 VDC LINEAR ANALOG OUTPUTS
- EQUIPPED WITH RS-232 INTERFACE



Model DPM-35XR is assembled in a high impact portable carrying case and supplied with a cooling coil, integral vacuum pump, inline filter and desiccant test cartridge. The DPM-35XR has an adjustable setpoint alarm with audible and visual alarms. The 4-20mA & 0-5Vdc analog outputs and RS-232 interface enables dew/frost point data from any drying process to be easily documented.

THE STANDARD FOR PLASTICS & INDUSTRIAL AIR DRYING SYSTEMS

OHMIC Instruments Model DPM-35XR Dew Point Meter is a portable instrument designed to measure the performance of plastic resin and compressed air drying systems.

The Model DPM-35XR measures dew point by utilizing microprocessor circuitry to convert the voltage output of OHMIC's HC-610 water vapor sensor and a temperature sensor to dew/frost point temperature by the use of psychometric equations.

Assembled in a high impact plastic carrying case, Model DPM-35XR is equipped with an internal vacuum pump for sampling from hopper dryers, chambers and ovens. A selector switch enables compressed air to be sampled through an orifice for pressure dew/frost point readings. In addition, Model DPM-35XR can be supplied assembled in a wall-mounted steel NEMA-12 enclosure. Linear analog outputs and the RS-232

interface enable long term recordings of the process. An adjustable setpoint alarm provides both visual (Green/Red Lamp) and audible alarms when dew/frost point conditions exceed acceptable levels. (Note: No audible alarm on NEMA enclosure)

The accuracy of the DPM-35XR is consistent with chilled mirror hygrometers costing thousands of dollars more. A certificate of calibration, traceable to NIST standards, is included.

Utilizing the DPM-35XR to monitor plastic resins assures that the drying equipment provides the performance for consistent high quality injection molded products. Periodic monitoring of industrial air systems results in reduced maintenance costs and avoids downtime caused by freeze-ups and separated water, the leading causes of corrosion in pneumatic systems.

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: MODEL DPM-35XR

Water Vapor Sensor	HC-610 (Integrated Thin Film Polymer)
Temperature Sensor	10K NTC Thermistor
Dew/Frost Point Range	-40 to +80°F
Dry Bulb Temperature Range	0 to 185°F
Dew/Frost Point Accuracy	± 4°F from -40 to +20°F ± 2°F from +20 to +80°F
Maximum Inlet Temperature	185°F (Cooling Coil Enables Sampling to 550°F)
Maximum Inlet Pressure	125 PSIG
Sensor Response Time	10 seconds for 63% Step Change
Vacuum Pump	-60" H ₂ O, 10 SCFH
Display Type	3-1/2 Digit LCD; 0.5"
Analog Outputs	0-5 Vdc & 4-20 mA
Alarm	Audible, with Silence Button Red/Green Indicator Lamps
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	12.8 x 10.3" x 6.1" (H x W x D). Plastic Carrying Case
Weight	9 lbs Net

ORDERING INFORMATION

DPM-35XR: Portable Dew Point Meter. Assembled in high impact plastic carrying case. Equipped with cooling coil, vacuum pump, filter, alarm and desiccant test cartridge.

DPM-35XRL: Optional Logging available.

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



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