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## MEDICAL AIR LINE MOISTURE METER MODEL AMM-10

- **DIRECT READOUT IN DEW/FROST POINT TEMPERATURE, RELATIVE HUMIDITY AND DRY BULB TEMPERATURE**
- **RANGE: -40 TO +80°F DEW/FROST POINT, 0-100% RH & 0-200°F DRY BULB. EACH VIEWABLE WITH FRONT PANEL SELECTOR SWITCH**
- **MICROPROCESSOR BASED. PROVIDES LINEAR ANALOG DEWPOINT OUTPUTS (0-5 Vdc & 4-20 mA) AND RS-232 INTERFACE**
- **VISUAL AND AUDIBLE ALARMS. SETPOINT MAY BE VIEWED AT THE PUSH OF A BUTTON. SETPOINT ADJUSTMENT EQUIPPED WITH A LOCKING POT.**
- **ALARM CONTACTS FOR A REMOTE ALARM**



**ANSI/NFPA-99** requires that compressed air used in hospitals and health care facilities "shall be delivered at a dew point temperature not to exceed +39°F". Each AMM-10 meets this requirement and includes a certificate of calibration traceable NIST dew point standards.

Model AMM-10 is assembled in a steel NEMA-12 enclosure and equipped with a remote pipeline mounted probe suitable for installation up to 175 PSIG.

## MODEL AMM-10 INSURES THE QUALITY OF HOSPITAL GRADE COMPRESSED AIR

OHMIC Instruments Model AMM-10 Air Line Moisture Monitor is designed to assure that the air delivered to health care facilities meets the criteria described by ANSI and NFPA-99. The standard was established to prevent the presence of condensation or liquid water in air lines. Condensation leads to corrosion, downtime and increased maintenance cost of pneumatic controls. The air used in respiratory therapy apparatus, ventilators and hyperbaric chambers must be free of excess water vapor. In breathing air systems, precautions must be made to assure that separated water is not respired into the lungs. The Model AMM-10 is equipped with all the features required for both station and remote monitoring. In addition, the monitor is used in industrial applications for humidity measurement and dew/frost point control.

Model AMM-10 utilizes microprocessor circuitry to convert the voltage output of OHMIC's HC-610 water vapor sensor and the resistance of an NTC thermistor to dew/frost point, %RH and dry bulb temperature by the use of psychrometric equations. The thermistor measures dry bulb temperature and is used to temperature compensate the humidity readings. The HC-610 water vapor sensor consists of a thin film polymer which varies in dielectric constant proportional to changes in the amount of water vapor present in air. The sensor's characteristic response curve is stored in the AMM-10's EPROM memory resulting in accurate and repeatable measurement. The sensor is assembled in a 1/2" NPT stainless steel fitting that is installed directly in pipelines up to 175 PSIG.

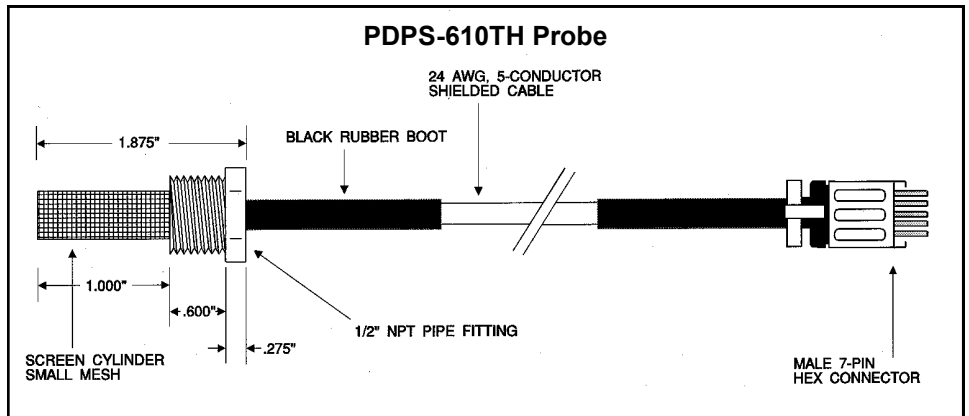
**WARRANTY:** All products manufactured by OHMIC Instruments are warranted to be free of defects in material and workmanship for one year after delivery. Any equipment found to be defective within this period will be repaired or replaced free of charge.

## SPECIFICATIONS - AMM-10

Power	120 Vac, 50-60 Hz *
Display	3-1/2 Digit LCD, 0.5"
Range: Dew/Frost Point Temperature	-40 to +80 °F, $\pm 4$ °F from -40 to +20°F & $\pm 2$ °F From +20 °F to +80 °F (Accuracy governed by %RH and Temperature)
%RH	0-100% RH,
Dry Bulb Temperature	0-200 °F (Display 0-199.9), $\pm 2$ °F
Maximum Temperature	140 °F Electronics, 185 °F Probe
Probe	PDPS-610TH (HC-610 Thin Film Polymer IC & 10K NTC Thermistor)
	Equipped with 6 Ft Cable * and 1/2" NPT SS Fitting. suitable for Installation to 175 PSIG
Response Time	10 Seconds for 63% Step Change
Analog Outputs	0-5 Vdc & 4-20 mA (Dew/Frost Point)
Dew/Frost Point Alarms: Visual	Red & Green Lamp
Audible	Piezo Transducer with Silence Button
Alarm Contacts	2 Amp, DPDT Relay Common, N/O, N/C contacts
Set Point Adjust	Push to View Button and Slotted Adjustment Potentiometer with Locking Nut
Computer Interface	Bi-Directional RS-232 Interface. Dew/Frost Point, %RH, Dry Bulb Temperature & Dew/Frost Point Data Transmitted in ASCII Comma Delimited Format. 9600 Baud, 8 Bits, 1 Start, 1 Stop, No Parity.
Data Logger Option	32 KByte Non-Volatile Memory. Equipped with Internal Clock MM:DD:YY, HH:MM:SS Military Time Format
Enclosure	Steel NEMA-12
Dimensions	10" x 8" x 4" (HxWxD), 9 Lbs Net
Calibration	Calibrated to NIST Traceable Chilled Mirror Dew Point Hygrometer and RTD Temperature Standards. Certificate of Calibration Included.

### \*OPTIONS

- 24 VDC operation @ 200 mA
- Logging version
- AMRA Remote alarm option
- Extra cable \$1.00/ft. to 25 ft.
- 10 Amp control relay



**ENGINEERING SUPPORT:** OHMIC Instruments designs and manufactures a full line of environmental sensors, instruments, controllers and 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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