

DPM-99

Drift-Free Dew Point Monitor for Compliance with NFPA 99

The Edgetech Instruments DPM-99 is a complete medical air dew/frost point monitoring and alarm system consisting of a chilled mirror hygrometer with bright LED display plus audible and visible alarm functions, all contained in a NEMA-12 enclosure. Using a primary method chilled mirror dew/frost point sensor, it is the drift free alternative, meeting Level 1 and Level 2 requirements of NFPA 99 for Medical Air.

Other types of dew/frost point sensors, due to inherent drift, require recalibration at regular intervals to remain within their accuracy specifications. The chilled mirror dew/frost point sensor of the DPM-99 is a primary method, drift free device, with accuracy traceable to NIST. Its Automatic Balance Control keeps the sensor's operation in top condition without the need for regular maintenance or periodic calibration.

Safety is the foundation of the Edgetech Instruments DPM-99 Medical Gas Dew Point Monitor. It features very high accuracy and sensitivity, fast response, failsafe alarm functions and analog outputs. Its ruggedized metal enclosure protects against electrical interference and environmental shock. An uninterruptable backup power supply is optional.

All Edgetech Instruments dew/frost point monitors are manufactured and supported in the USA in a modern, ISO 9001:2015 registered, ISO/IEC 17025:2017 accredited facility. All calibrations and certifications are traceable to NIST.

Features:

- Performance exceeds requirements of NFPA 99 for Medical Gas Dew Point Monitoring
- The drift free alternative for continuous dew/frost point monitoring
- Easy to install
- Virtually maintenance free
- NIST traceable dew point certification
- Fast response
- Long sensor life
- Rechargeable batteries, recharger included
- Primary method measurement of moisture content



The DPM-99 for Medical Air

NFPA 99 is a standard issued by the National Fire Protection Agency. It is the code used to design compressed air systems for medical air in domestic hospitals and healthcare facilities. In these facilities there are two types of medical air systems, Level 1 and Level 2, defined by the standard as:

Level 1 Medical Piped Gas and Vacuum Systems. Systems serving occupancies where interruption of the piped medical gas and vacuum system would place patients in imminent danger of morbidity or mortality.

Level 2 Medical Piped Gas and Vacuum Systems. Systems serving occupancies where interruption of the piped medical gas and vacuum system would place patients at manageable risk of morbidity or mortality.

Further, the NFPA 99 standard states: Dew point shall be monitored and shall activate a local alarm and all master alarms when the dew point at system pressure exceeds +4°C (+39°F).

 **Edgetech Instruments**

ISO/IEC 17025:2017 Accredited
ISO 9001:2015 Registered

Technical Specifications

Sensor Type: Primary method dew/frost point chilled mirror sensor.

Dew/Frost Point Measurement Range:

S1 sensor: -10°F to 122°F

S2 sensor: -45°F to 122°F

Dew/Frost Point Accuracy:

±0.5°F over entire range

Power: 95-260 Vac, 50 to 400 Hz

Operating Temperature: 32°F to 122°F

Sample Connection: ¼ inch compression fitting

Sample Flow: 0.5 to 5.0 SCFH, through integral flow meter and valve

Sample Pressure: 0 to 150 psig, 55 psig nominal

Outputs:

Analog: 4 to 20 mA

Range: -58°F to 122°F

Compliance: 9.0 Vdc, 450 ohms

Display: 8 digit alphanumeric LED, 0.5" high, red

Alarm Audible: >98 db at 2 feet with means to temporarily disable

Alarm Visible: Flashing display message

Alarm Relay: 1 FORM C, non-latching, 10 A @ 240 Vac, 8 A @ 24 Vdc, 1/2 HP @ 240 Vac, programmable

Dimensions: 14"H x 10.7" W x 3.75"D

Weight: 7 lb.

Mounting: Wall mount standard

Material: Aluminum

Low Dew/Frost Point Kit: 2-stage sensor (recommended for desiccant driers)

Filter Kit: In-Line particulate/coalescing filter

Typical Compressed Gas Application
DPM-99
Typically, there are redundant Drier Systems

