

## **CMH-P2 Portable Chilled Mirror Hygrometer**

High Preceision Trace Moisture (Dewpoint) Measurments

NEW



## **Features and Benefits**

- Chemically resistant, primary method dewpoint sensor
- Drift free and certified against international traceable standards
- Best in class air cooled temperature depression
- Wide measurement ranges from -70 °C to +70 °C (-94 °F to 158 °F) dew point temperature
- Remotely or locally mounted sensor options
- Automatic Balance Control mode provides automatic correction for optics contaminants
- Rugged, high impact portable case
- Multiple interface options
- Choice of sampling systems

The **CMH-P2** Chilled Mirror Hygrometer features drift-free accuracy, International Standards traceability, low maintenance, high durability and ease of use in a portable package, resulting in a system ideally suited for the demands of field use.

The **CMH-P2** has all the standard features of the well known Alpha Moisture Systems Chilled Mirror Hygrometer (CMH) in a portable package, with a modular Chilled Mirror Sensor that is chemically resistant to background gases, configured to meet your dewpoint measurement requirements.

Whether you use it as a field transfer standard, to spot check your process air dryness, or to measure end gas dewpoint, you will find the **CMH-P2** delivers the Alpha Moisture Systems' advantage: An ideal system tailored to your application needs. Choose the customized sampling system designed to match your measurement requirements. Configure it for positive pressure sample gas or to extract a gas sample using an integrated vacuum pump.

Select the best user interface options to meet your needs. The **CMH-P2** will be ready to use, right from receipt of delivery. All Alpha Moistures Systems dewpoint hygrometers are manufactured and supported in the UK in a modern, ISO 9001:2015 registered facility with accredited calibration laboratory. The **CMH-P2** is delivered with a certificate of calibration which is traceable to International Standards.

## **Example Applications**

- Compressed air
- Furnace/heat treating
- Fluidized bed dryers
- Metrology
- Plastic molding
- Pharmaceutical
- Laboratories
- Clean/Dry rooms
- Power and energy systems
- Air brake dryer monitoring



Side view of the CMH-P2

## **Specifications**

**Sensor Type** Primary method, chemically resistant, chilled mirror dewpoint sensor

**Sensor Construction** Wetted materials 316 stainless steel, Teflon, Viton seals.

Mirror: chrome (platinum or 316 SS optional) Easy access flip top mirror access

CMH Standard: 65°C depression, -45 °C to +75 °C (-49 °F to +167 °F) **Measuring Range** 

> Fan Cooled: 85°C depression, -65 °C to +75 °C (-85 °F to +167 °F) High Efficiency: 97°C depression, -70 °C to +75 °C (-94 °F to +167 °F)

No liquid cooling required.

Other ranges available, consult factory.

**Accuracy** Dewpoint: ±0.2 °C (±0.36 °F)

Display: 8 Line LCD. Graphic data display, backlit, 3 parameters display General

simultaneously.

Operating Temperature: 0 °C to 50 °C (32 °F to 122 °F).

Sample Connection: 1/4" compression fitting, configured for positive pressure

sample gas standard.

Sample Flow Rate: 0.5 to 5 SCFH with integral flow meter.

Sample Pressure: 0 to 150 psig, higher pressures available, consult factory.

**Power & Outputs** Power: 90-230 VAC ±10%, 50 to 400 Hz

Analog Outputs: 0 to 5 Vdc, 4 to 20 mA, 0 to 10 Vdc or 0 to 20 mA. User scalable,

to drive peripheral devices.

Available simultaneously, one output per measurement parameter. Scalable

throughout the entire operating range of psychrometric variables.

Programed via front panel or serial port

Serial Output: RS-232

Relay Alarms: Two, user configurable, 1 FORM C, 10A @ 240 Vac, 8A @ 24 Vdc,

1/2 HP @ 240 Vac. Can be set for latching or auto-reset mode.

Weights & Dimensions Weight: 10.9 kg (24 lbs).

Enclosure Dimensions: H = 375mm x W = 457 x D = 178 (H = 14.75" x W = 18"

x D = 7"

Plastic carrying case.

Options:

Vacuum pump for sample extraction.

Pressure transducer for automatic pressure compensation.

Serial to Bluetooth data acquisition. Remote sensor mounting kit.

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