CMH-RPC

Precision Chilled-Mirror Dewpoint Hygrometer

Features and Benefits

- A primary measurement instrument, ideal for laboratory and precision applications
- 3 Stage Chilled Mirror Hygrometer, with integral cooling
- Precise measurement to -95 °C frost/dew point, 37 ppb(V)
- High accuracy instrument (±0.2 °C dewpoint) for laboratory or similar applications
- Backlit LCD displaying readings in °C or °F dewpoint and ppm(V)
- Optional temperature and pressure sensors are available
- RS232 Serial comms
- Pressure measurement can be displayed using the optional pressure transducer
- 2 programmable alarm relays
- Automatic Balance Control (ABC), for fast and easy measurement and control
- Supplied with a Calibration Certificate traceable to National and International Humidity standards

CMH-RPC Precision Chilled Mirror Dewpoint Hygrometer accurately measures the dewpoint of a gas by cooling a mirrored surface, over which the gas flows until a layer of dew forms on the surface.

Bench or Counter Top Standing - Front panel access to all main components including mirror cleaning - Fast Response - Stable - Reliable - Quick Installation.

The Chilled Mirror Dew Point Hygrometer utilises a 3-stage cooler combined with an integral refrigeration unit to measure the dewpoint in gases from below -95 °C to +20 °C (-139 °F to +68 °F) dewpoint with an accuracy of ±0.2 °C dewpoint.

This primary measurement principle makes the CMH-RPC the ideal instrument for laboratory, scientific, and research applications and a reference instrument for checking and dewpoint calibration of Dewpoint Meters, Dewpoint Transmitters, Dew Meters and Dewpoint Analysers.

Please do not hesitate to contact us for price, delivery, or details of your local distributor.

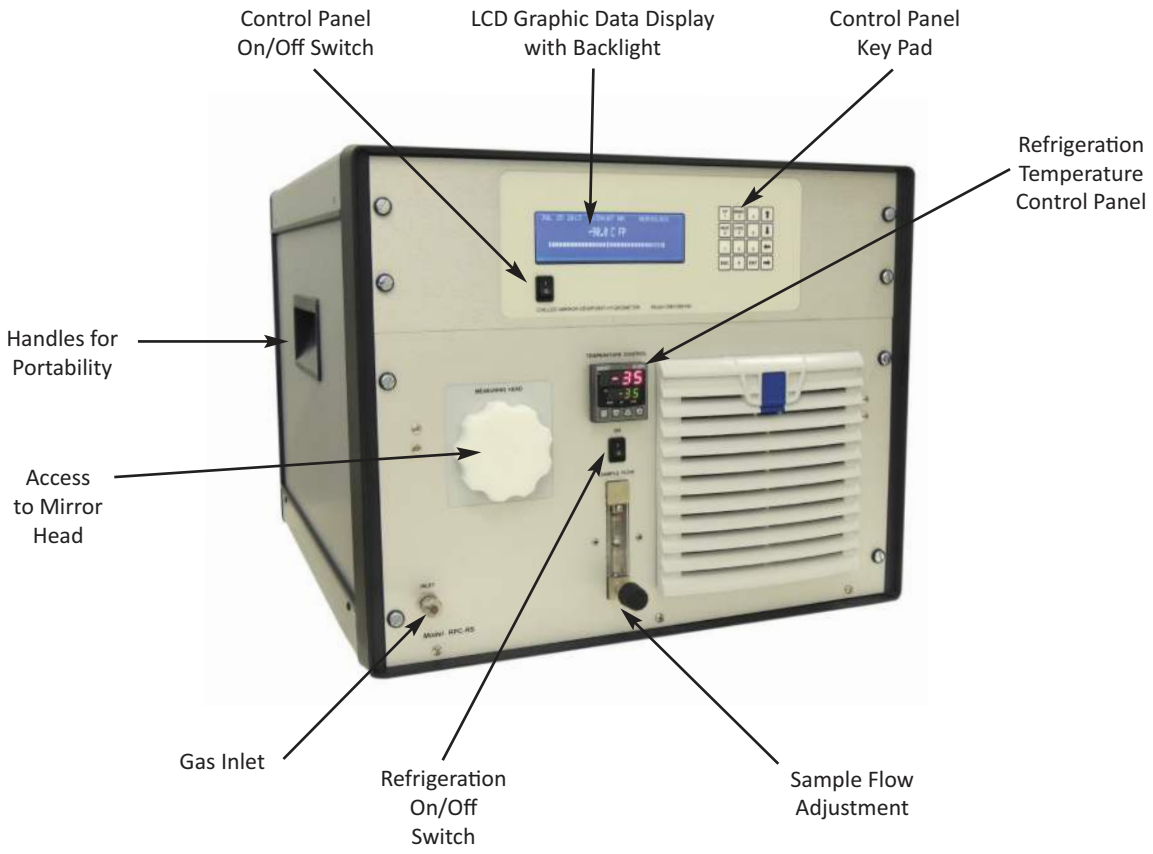
CMH - Technical Data

Sensing Element	Three Stage With Additional Refrigeration
Analogue output	0-5 Vdc, 4-20 mA, 0-10 Vdc, or 0-20 mA User Scalable to Drive Peripheral Devices Available Simultaneously, One Output per Measurement Parameter Scalable Throughout the Entire Operating Range of Psychometric Variables Programme via Front Panel
Serial Output	RS232 Communication With Terminal, Printer, or Computer Remote Programming Data Output Such as Dew Point and Alarm Status
Power Supply	110 Vac or 230 Vac, 50/60 Hz (Specified at Order)
Dewpoint Range	-95 °C Dewpoint to +20 °C Dewpoint at 22 °C Ambient Temperature
Electromagnetic Compatibility (EMC)	Complies with BS EN ICE 61326-1
Accuracy	+/-0.2 °C (0.36 °F) dewpoint
Manual Balance Control (MBC)	Automatically Corrects for Most Mirror Contaminants Automatically Re-Balances the Optics at Switch On
Programmable Automatic Balance Cycle (PABC)	Programmable Interval of Balance Control for Greatest Convenience Increases the Length of Unattended Operation
Dual Alarm Capability	User Programmable Can be set for latching or auto-reset mode

Pressure transducer input for psychometric variable	Optional Extra
Temperature sensor for RH calculation	Optional Extra
Factory Calibration	Supplied with a calibration certificate traceable to National and International Humidity standards. We recommend annual laboratory calibration
Sample Flow Rate	0.25 to 2.4 L/min (0.5/5.0 SCFH)
Sample Pressure	0 to 5 bar (0 to 75 psia)
Weight	47 kg
Dimensions	Height 600 mm, Width 520 mm, Depth 435 mm
Manufacturer's Warranty	12 months in case of defective parts or faulty workmanship

Component Location

CMH-RPC



Note: Can be configured to include pressure or temperature measurements.

How to order

Please contact us to discuss with our experienced Technical Sales Engineers your exact requirements.

We also specialise in Engineered Solutions, go to:
https://amsystems.co.uk/products-and-services/engineered-solutions/
for more information

Call +44 (0) 1274 733 100 or Email: info@amsystems.co.uk to discuss your needs.

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