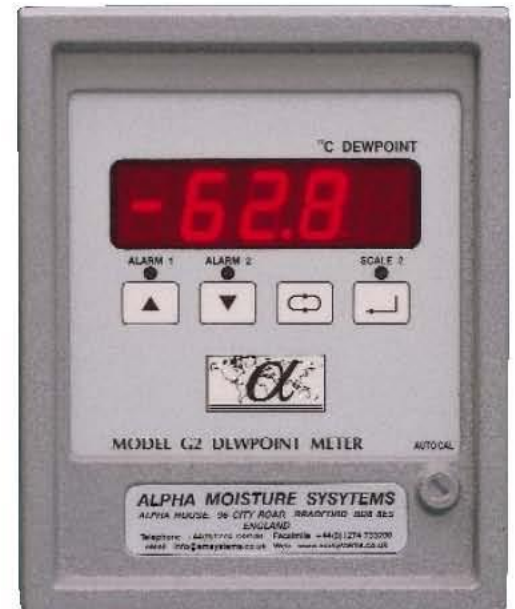


Features :-

- Overall Range -110°C to +20°C Dewpoint
- 4-20mA Isolated Output - Fully Adjustable
- Optional RS232 or 4-20mA & RS232
- Digital Indication in °C or °F (Selectable)
- Accuracy $\pm 2^{\circ}\text{C}$ Dewpoint
- User Friendly - Simple Operation
- Automatic Calibration
- Self Diagnostics on Start-up
- 100/120, 200/260V AC & 10-40V DC Operation
- Sensor Cable Open / Short Circuit Indication
- Two Alarms (View / Adjust Setpoints From Front Panel)
- Calibration Traceable To National & International Standards



The **Alpha Moisture Systems Model G2** Dewpoint Meter is a single channel hygrometer designed, utilising advanced electronics, to provide accurate and reliable on-line monitoring of dewpoint temperature of dry air or gas in industrial process.

Model G2 is used in conjunction with any one of a range of dedicated Ultra High Capacitance Sensors, incorporating Automatic Calibration and covering an overall range from -110°C to +20°C dewpoint.

The indication of dew/frost point is on a 15mm five digit LED display. Model G2 offers two sets of fully adjustable alarm contacts which can be adjusted using the up and down keys, and the set points are viewed by simply pressing the appropriate alarm set key on the front panel of the instrument.

Model G2 also offers an isolated 4-20mA output signal, which is linear with dewpoint, and fully adjustable over any desired range. Optional RS 232 output is also available. The instrument is available as a panel mounting unit offering protection to IP40 (NEMA 1).

Model G2 is supplied ready for use, with calibration certificate traceable to National & International Humidity standards, instruction manual and 2 metres of connecting cable.

W I T H U S

대전광역시 대덕구 대화동 289-1
 산업용재유통단지 11동 112호
 TEL : 042)6 7 0 - 7 8 4 0
 FAX : 042)6 7 0 - 7 8 4 8

SPECIFICATIONS - Model G2

SENSOR TYPE : Aluminium Oxide Ultra High Capacitance Sensor

RANGE : Eight different ranges encompassing an overall range of -110°C to +20°C dewpoint (-148 to +68°F)

DISPLAY : 5 Digit LED

DISPLAY RESOLUTION : 0.1°C dewpoint

AUTOMATIC CALIBRATION : Via potentiometer on front panel.

ALARMS : Two separately adjustable, voltage free contacts. Contact Rating 5A @ 240 VAC / 1A @ 24VDC. Individually configurable to operate with relays normally energised or de-energised and to trip on rising or falling readings.

OUTPUT : 4-20mA (max. series resistance 550Ω). Output linear with °C dewpoint and fully adjustable over any part or all of the instrument range. Isolation : 500 Vrms. Other Options : RS232 only or RS232 & 4-20mA

PRESSURE : Maximum sensor pressure 50 barg (standard) High pressure version optional. Supplied with 2m of sensor cable and all connectors. The system can be operated with up to 1 kilometre of sensor cable and longer than standard lengths can be supplied on request.

POWER REQUIREMENT :

AC Supply : 100-132 / 200-264V AC (47-70 Hz)
Consumption 5VA
Dc Supply : From 10-40V DC
Consumption : <400mA @ 10V

ELECTRONICS ACCURACY : Better than ± 1% of range.

WARM UP TIME : Less Than 60 Seconds

SENSOR CALIBRATION ACCURACY : ±2°C dewpoint. All units supplied with certificates documenting factory calibration against known moisture levels traceable to National & International Humidity Standards.

REPEATABILITY : ± 0.3°C dewpoint.

TYPICAL RESPONSE TIME : 95% of reading within 20 seconds in normal operation.

OPERATING CONDITIONS

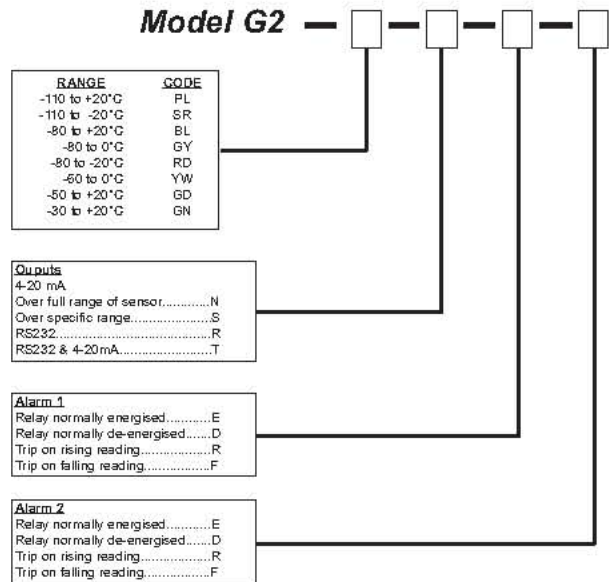
Temperature : -10°C to +60°C
Humidity : 0-90% RH, Non-condensing
Storage Temperature : -40°C to +85°C

ELECTROMAGNETIC COMPATIBILITY (EMC)

Immunity : Complies with EN 50082-1 : 1992
Emissions : Complies with EN 50081-1 : 1992

WARRANTY : One year from date of delivery against faulty materials or workmanship.

Ordering Information



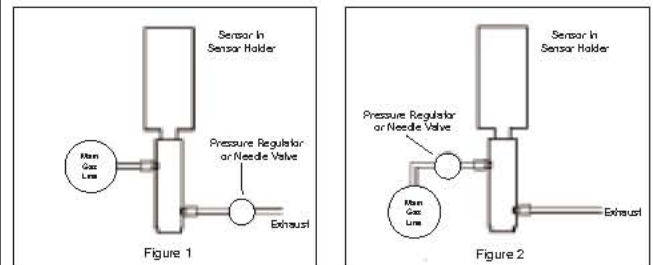
Example : If your requirement is for an analyser with a range of -80 to +20°C dewpoint with the output spanned over the sensor range and both alarm relays normally energised and set to trip on a falling reading , then please order as :

Model G2-RD-N-EF-EF

Corrosive Gases

The Sensor should not be exposed to corrosive gases (or corrosive contaminants in the main gas sample) as they would chemically attack the sensor and render it useless. Examples of such gases are mercury (Hg), ammonia (NH₃), chlorine (Cl₂) and wet acid vapours i.e. acid vapours in gas with moisture content greater than 100ppm (v). Strong oxidising agents such as ozone (O₃) should also be prevented from coming into contact with the sensor.

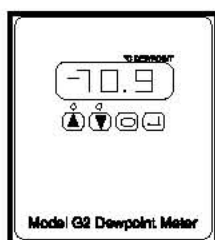
Basic Installations



As illustrated above, the sensor may be installed at line pressure (fig.1) or at atmospheric pressure (fig.2). We recommend installation at atmospheric pressure because the sensor is then protected from condensate in the event of dryer failure.

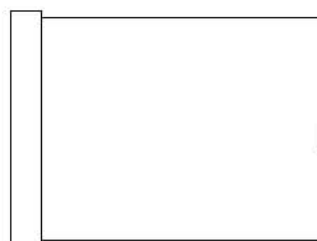
Note: Samples should be taken from the upper surface of the main line to prevent any risk of condensate reaching the sensor. Additional components may be required for specific applications - refer to *Accessories* and *Sampling System* specification sheets. Use stainless steel, nickel or copper piping wherever possible.

Weights & Dimensions



107

132



12,10

112

CABINET : All anodised aluminium with front panel overlaid with polyester membrane

PROTECTION : Generally to IP 40 (NEMA 1)

WEIGHT : 1.3kgs (nett)

PANEL CUT OUT : 103 x 112 mm

MOUNTING : 4 fixing screws.

All dimensions in mms

180 O/A