



# Cermox

## Portable Dewpointmeter



This high specification portable hygrometer gives a wide operating range, extremely fast response and a host of user-definable features such as data logging and multiple display options



*Cermox  
Portable Dewpointmeter*

### The Most Complete Portable Hygrometer

Packed full of features and with a performance to match, Cermox sets the standard amongst portable hygrometers. Delivered with a traceable calibration to  $\pm 1$  °C dew point accuracy, Cermox is ready to use, out of the box. It is extremely easy to operate, yet allows the advanced user to perform more complex functions, like pressure compensation, range selections, input scaling, data logging, etc. No other instrument looks or performs like Cermox

### Easy Operation

Cermox is fully self-contained - no external services are required. Simply connect a clean sample gas to the Swagelok® inlet port, turn on the power and within seconds Cermox is ready to display the measured dew point of the sample gas under test. For process gas applications, a range of 'bolt on' sampling systems are available.

### Features

- Easy to use
- Super-fast response
- High accuracy and repeatability
- User friendly display with data logging facility
- Lightweight construction
- Long battery life
- Intrinsically safe version\*

### Extremely Fast Response

Our users always rate a fast speed of response as the key feature of a portable hygrometer. Cermox has been designed with this in mind. With an inherently fast Ceramic Moisture Sensor at its heart and a minimum volume stainless steel sample housing, Cermox has a head start on the competition. Add to this Cermox's user selectable field operation mode that allows even ppm level measurements to be made in a few minutes and the result is a world-class hygrometer with superior performance.

### High Accuracy and Repeatability

The combination of advanced sensor technology and measurement circuitry give Cermox a standard measurement range from -100 to +20 °C dew point with indication down to -120 °C and up to +30 °C dew point. Cermox offers a measurement accuracy of  $\pm 1$  °C dew point in the range +20 to -59.9 °C dp and  $\pm 2$  °C dew point in the range -100 to -60 °C dp. Resolution is 0.1 °C dew point across the entire calibration range.

### User Friendly Display

Cermox's programmable display interface powers up to give an almost instant display of the measured dew point. Its clear LCD display can easily be set, using the intuitive drop-down menu, to show a wide variety primary and secondary measurement data, including dew point in °C, °F and K; parts per million by volume and weight for a number of gases, pounds per million standard cubic feet and percentage relative humidity. System pressure or temperature can be input to the instrument to provide active compensation.

\* See separate datasheet for details of Cermox I.S.



**The Dew Point Specialists**



## Data Logging Facility

Built into the instrument is a logging system that can store up to 10,000 measurement points. The logger will store both dew point and the second process variable (temperature or pressure), along with tag and time information. Logging start time, interval and test duration are all selected from the instrument's drop down menu. Once the log has been taken, data can be downloaded onto a PC using Windows™ Terminal or a similar data transfer program.

## Lightweight Construction

Weighing a total of 3 kg, Cermax is one of the lightest portable instruments available. This is not, however, at the expense of robustness. The strong moulded polyurethane carry case gives the optimum combination of physical strength and low mass and is practical too, giving an IP65 (NEMA 4) protection rating. An optional woven carry bag is ideal for storage of sampling system, pipework etc and for transportation when Cermax is not in use.

## Long Battery Life

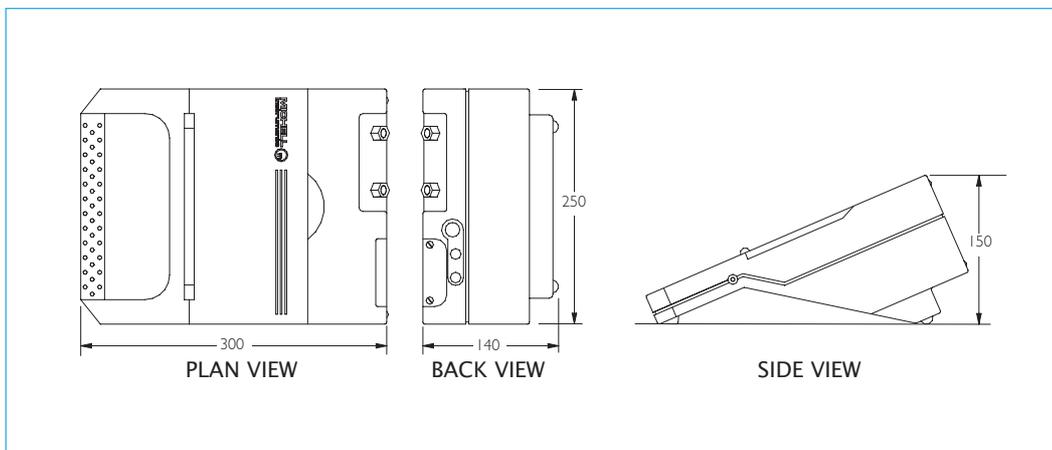
Cermax uses a sealed rechargeable battery pack which gives an average usage time of more than 8 hours between charges, at normal room temperature. The battery pack is easily removable and spare battery packs are available so that the instrument can be permanently operational, if required.

Charging can be achieved either by removal of a battery pack or via the integral charger jack socket.

## Technical Specifications

<i>Gas wetted parts</i>	316 stainless steel
<i>Gas connections</i>	1/8" Swagelok® inlet and outlet couplings
<i>Display</i>	240 x 64 dot matrix LCD
<i>Range</i>	Calibrated from -100 to +20 °C dew point; readings to -120 and +30°C dew point
<i>Accuracy</i>	±1 °C from -59.9 to +20 °C dew point; ±2 °C from -100 to -60 °C dew point
<i>Resolution</i>	0.1°C dew point (3 significant figures for all other units)
<i>Units</i>	°C, °F, K dew point; ppm <sub>v</sub> ; ppm <sub>w</sub> for air; N <sub>2</sub> , H <sub>2</sub> , SF <sub>6</sub> , CO <sub>2</sub> , natural gas; gm <sup>-3</sup> (natural gas); Lb/mmscf (natural gas)
<i>Secondary input</i>	0-20 mA or 4-20 mA for temp or pressure
<i>Data storage</i>	Up to 10,000 samples of primary and secondary variable, time and date stamp and ident number
<i>Communications</i>	RS232C
<i>Power</i>	Internal re-chargeable battery pack (removable) charged by external AC powered charger (supplied). 8 hours normal operation between charges.
<i>Case</i>	Custom polyurethane case with integral padded carry handle
<i>Dimensions</i>	250W x 300D x 150H mm approx
<i>Weight</i>	3 kg
<i>Ingress protection</i>	IP65 (NEMA 4)
<i>Operating temp</i>	-20 to +50 °C
<i>Storage temp</i>	-65 to +65 °C
<i>Operating pressure</i>	30 MPa (max)
<i>Flow rate</i>	0.5 to 5 Nlmin <sup>-1</sup>
<i>Optional extras</i>	Carry bag; shoulder strap; sampling systems; spare battery pack

## Dimensions



Dimensions mm