

Cermax I.S.

Portable Dewpointmeter

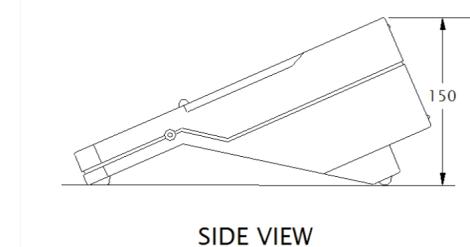
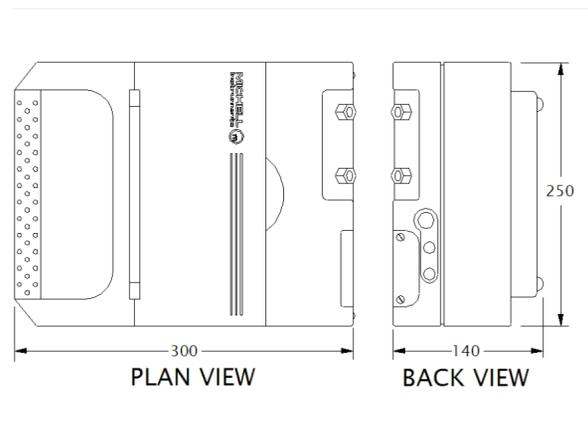
Technical Specifications

Gas wetted parts	316 stainless steel
Gas connections	1/8" Swagelok® inlet and outlet couplings
Display	240 x 64 dot matrix LCD
Range	Calibrated from -100 to +20°C dew point; readings to -120 and +30°C dew point
Accuracy	±1°C from -59.9 to +20°C dew point; ±2°C from -100 to -60°C dew point
Resolution	0.1°C dew point (3 significant figures for all other units)
Units	°C, °F, K dew point; ppm _v ; ppm _w for air, N ₂ , H ₂ , SF ₆ , CO ₂ ; natural gas; gm ⁻³ (natural gas); Lb/mmscf (natural gas); % rh
Data storage	Up to 10,000 samples of primary and secondary variable, time and date stamp and ident number
Communications	RS232C
Power	Internal re-chargeable battery pack (removable) charged by external AC powered charger (supplied). 8 hours normal operation between charges.
Case	Custom polyurethane case with integral padded carry handle
Dimensions	250 W x 300 D x 150 H mm approx
Weight	3 kg
Ingress protection	IP65 (NEMA 4)
Operating temperature	-20 to +50°C
Storage temperature	-65 to +65°C
Operating pressure	30 MPa (300 Barg) max.
Flow rate	0.5 to 5 Nlmin ⁻¹
Intrinsic safety	Certified to IIG EEx ia IIC (155°C) T3 through Baseefa (2001) Ltd Certificate No Baseefa03ATEX0090X FM: Certificate J.I.6D5A0AX CSA: File No LR 114519-1

OPTIONS:
Carry Bag - Lightweight, padded carry bag made from woven cotton for Cermax and accessories
Shoulder Strap - Shoulder carry strap for Cermax Portable Dewpointmeter.
Sampling Systems - (as shown on right) Designed for sample conditioning for specific applications.

Michell Instruments Ltd
 48 Lancaster Way Business Park
 Ely, Cambridgeshire
 CB6 3NW, United Kingdom
 Tel: +44 (0) 1353 658 000
 Fax: +44 (0) 1353 658 199
 Email: info@michell.co.uk
 www: www.michell.com

Dimensions



Dimensions mm



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Portable Dewpointmeter

The hygrometer of choice for the measurement of dew point temperature or moisture content in hazardous area gas applications



Features

- ATEX, CSA and FM certified
- Simple and user friendly operation
- Fast response speed
- Readings from -120°C to +30°C
- High accuracy (±1°C)
- Long battery life for continuous field measurements
- Full self-contained
- Self diagnostics for easy operation
- Integrated data logging
- Dew point measurement pressure compensated
- Rugged yet lightweight

Applications

- Hydrogen cooling
- CNG filling stations
- Natural gas dryers
- Natural gas storage
- Natural gas processing
- Petrochemical processes
- Industrial gases
- ... and many more

Please note: The accuracy stated represents the typical variation between the instruments under test and a calibrated and corrected reference.

Please contact us for latest version: Cermax I.S.: Ref: CMX-IS-0708

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Portable Dewpointmeter

The Most Complete Portable Hygrometer

Cermax I.S. provides raw performance, rugged reliability and advanced features for measuring the dew point of non-flammable and flammable gases within petrochemical, natural gas plants and other hazardous areas. It provides the site chemist and operational staff with an effective means to check the moisture concentration at any point in their process.

Cermax I.S. is also perfect for any industrial application requiring safe measurement of flammable gases, such as hydrogen used as coolant for electricity generator sets or as a controlled furnace atmosphere for heat treatment of metals.

Easy Operation

Cermax I.S. is a self-contained system - no external services are required. Simply connect a clean sample gas to the Swagelok® inlet port, turn on the power and within seconds Cermax displays the measured moisture value of the sample gas. For process gas applications, sample system modules are available that couple directly to the unit.

Extremely Fast Response

Cermax I.S. was designed for quick speed of response as its key feature. With an inherently fast Ceramic Moisture Sensor and a minimum volume stainless steel sample path, Cermax has a head start on getting you the information you need. Cermax goes even further adding a user selectable field operation mode that allows even ppm level measurements to be made in a few minutes. The result is a world-class hygrometer with superior performance.

High Accuracy and Repeatability

The combination of advanced sensor technology and measurement circuitry give Cermax a standard measurement range from -100 to +20°C dew point with indication down to -120°C and up to +30°C dew point. Cermax offers a measurement accuracy of better than ±1°C dew point over the range of -60 to +20°C dew point and better than ±2°C from -100 to -60°C dew point. Resolution is 0.1°C dew point across the entire calibration range.

Intrinsically Safe Certification

Cermax I.S. is certified by Baseefa (2001) Ltd for use in hazardous areas to II 1G ATEX ia IIC (155°C) T3 and also FM (USA) listed to intrinsically safe CL1, Div1, GpA, B, C & D T3C and CSA (Canada) to Ex ia IIC T3 (Class 1, Div 1, Groups A, B, C & D).

www.michell.com

1/8" Swagelok Gas Connections

ATEX, CSA and FM certified

Quick operation guide

Clear, easy to read display with multiple engineering units

Robust keypad

Rugged but lightweight housing

Quick operation guide

Display and Keypad cover

Related Products



Cermax

Cermet II I.S.

Promet I.S.

Promet EExd

User Friendly Operation

Cermax powers up to give an almost instant display of the measured dew point. Its easy to read LCD display and intuitive drop-down menus allow a wide variety primary and secondary measurement data choices including dew point in °C, °F or K; ppm_v, Lb/MMSCF, %RH and ppm_w for gases. A system pressure or temperature input can be connected to the Cermax to provide compensation for process conditions.

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 the moisture value and a 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 data has been recorded, it 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 and yet it is very rugged and can handle daily field use. The strong molded polyurethane case provides impact resistance, light weight in an easy to carry IP65 (NEMA 4) rated unit. A carrying bag with pockets for a sampling system module, fittings and small tools is also available for carrying everything you need to use the Cermax.



Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice.

