

NEW



SADPmini2-Ex Hand-Held Dew Point Meter

Next Generation Intrinsically Safe Hand Held Dewpoint Meter

Rugged, lightweight NEMA4X (IP66) construction makes **Model SADPmini2-Ex** the most reliable portable dewpoint hygrometer available, for rapid spot checking of dewpoint or trace moisture content in gases and dry compressed air in areas where an Ex certified instrument is required. The ultra-high capacitance sensor gives unsurpassed sensitivity, speed of response, repeatability and stability.

Model SADPmini2-Ex is ideal for hazardous area use.



● Fast Repeatable Measurements

Reduced volume of the redesigned desiccant head gives even more rapid spot check measurements of moisture in gases and dry compressed air.

The unique innovative keypad design allows quick, intuitive, selection of the versatile features incorporated in the instrument and modification of all set up choices. The full color LCD display shows the measurement in two, independently selectable, units simultaneously, together with a linear analogue representation of the main unit. A single button press, changes the display to a real time graph of the readings in the main units.

Connection to a pc via USB also enables the user to modify and save the set up, and save details via the PC. Powerful logging and graphing capabilities and Bluetooth communication are standard features. A cellphone app is available for communication with Bluetooth devices.



USB	<input checked="" type="checkbox"/>
BLUETOOTH	<input checked="" type="checkbox"/>
LOGGING	<input checked="" type="checkbox"/>
SD CARD	<input checked="" type="checkbox"/>
LI-ION BATTERY	<input checked="" type="checkbox"/>
CALCULATOR APP	<input checked="" type="checkbox"/>
2 YEAR WARRANTY	<input checked="" type="checkbox"/>

KEY FEATURES

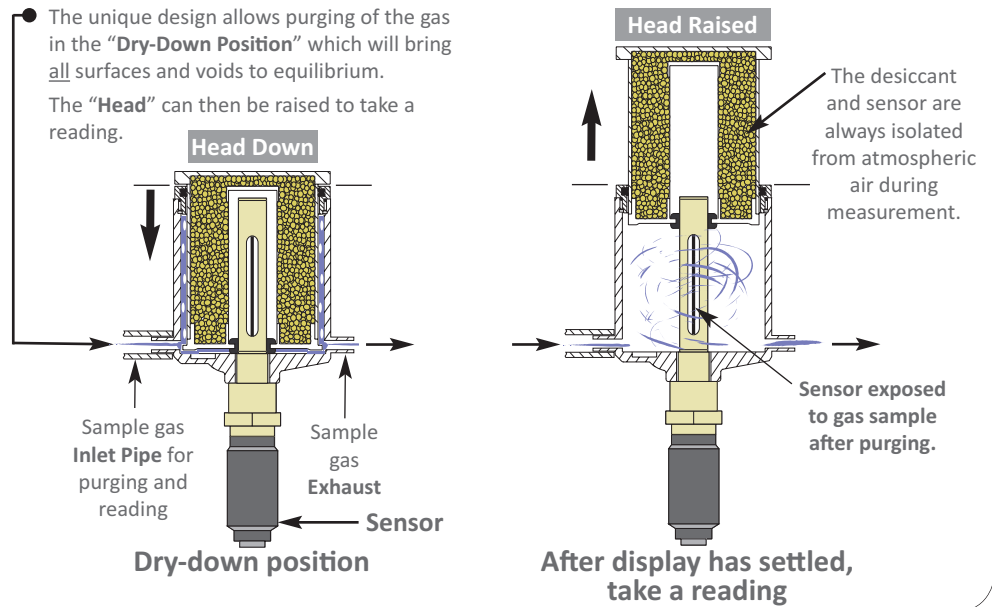


- Desiccant dry down head for rapid tests.
- Automatic Calibration (AutoCal) to maintain accuracy between laboratory calibrations.
- Ultra-high capacitance sensor for industry leading sensitivity.
- Highly specific to water vapour.
- Units user selectable for °F and °C dewpoint, ppm(v), ppm(w), mg/m³ or lb/MMSCF.
- Battery life over 150 hours (6+ days) of continuous operation.
- Language user selectable in English, French, German, Spanish, Korean, Japanese, Chinese, Portuguese, Italian and Russian.
- USB PC communication and charging.
- Removable micro SD card for calibration history, data back up and user manuals.
- Accuracy ±3.6°F (±2°C) dewpoint.
- Calibrations traceable to National and International standards.
- Advanced logging and graphing included.
- Bluetooth communication
- Various ranges between -184°F and +68°F (-120°C and +20°C) dewpoint allows the most appropriate choice for the application.
- Integral pressure dewpoint calculator for both ideal gases and natural gas.
- Full color graphics LCD display.
- Simultaneous display of two different selectable units.
- Light weight, 3.1 lb (1.4 kg)
- Anti-static carry bag included.

Desiccant Dry Down Technology

The Desiccant Head Assembly

Keeping the sensor dry between tests ensures that the SADPmini2-Ex is always ready to carry out rapid spot checks. The unique design of the Desiccant Head achieves this by surrounding the sensor with desiccant before the head is raised for sampling. At no time is the sensor allowed to come into contact with ambient air. The chamber is also designed so that the void space and chamber wall surfaces are purged with sample gas, before exposure of the sensor, so giving faster, more accurate and reliable results.



Specifications

Ex Information

II 1 G Ex ia IIC T4 Ga
II 1 D Ex ia IIIB T60° T50 80°C Da
-20°C < Ta < +50°C

IECEX BAS16.0067

UL US LISTED

INTRINSICALLY SAFE / SÉCURITÉ INTRINSÈQUE Exia
Class 1 Div 1 Groups A, B, C and D T4
-20°C < Ta < +50°C

Sensor type

Ultra-high capacitance aluminium oxide.

Ranges

-184°F to -4°F (-120°C to -20°C) dewpoint, **Silver**
-148°F to +32°F (-100°C to 0°C) dewpoint, **Purple**
-112°F to +68°F (-80°C to +20°C) dewpoint, **Blue**

Calibration

Supplied with a Certificate of Test and Calibration traceable to NIST/NPL.

Accuracy

Better than ±3.6°F (±2°C dewpoint)

Repeatability

Better than ±0.54°F (±0.3°C dewpoint)

Automatic Calibration (AutoCal)

Span check and correction carried out by following simple on screen instructions.

Temperature coefficient

Temperature compensated for operating range.

Typical sensor response times

Dry to Wet: -166°F to -4°F (-110°C to -20°C) dewpoint, <20 secs
Wet to Dry: 14°F to -76°F (-10°C to -60°C) dewpoint, <180 secs

Sample flow

Flow independent, recommended 5 to 10 lt/min, max 20 lt/min.

Sensor life

Typically 10 years, dependant on application.

Sensor replacement

Field replaceable.

Pressure dewpoints

Integral calculator for display of dewpoints at pressure for both "ideal" gases and natural gas.

Electrical

Electromagnetic compatibility

Conforms to EMC Directive 89/336/EEC, amended 95/31/EEC

Display

3.5 inch full color LCD graphical display with backlight.

Power supply

Rechargeable Li-ion battery/cell.

Charges from USB or universal AC/mains charger supplied.

Cell life

In excess of 150 hours* (6+ days) continuous use from full charge.

Time to full charge

Empty to full, approx. 14 hours. Charge overnight recommended.

Warm up time at switch on

2 seconds

Micro SD card

Contains User Tool software and pdf of Operating Manual, downloaded to PC when connected.

Mechanical

Weight

3.1 lbs (1.4 kg)

Dimensions

8.47 x 4.25 x 4.88 inches (215 x 108 x 124 mm) with head closed.

Ingress protection

NEMA4X (IP66)

Operating pressure

Atmospheric pressure. 4 psig (0.3 barg)

Operating temperature (ambient)

-4°F to +122°F (-20°C to +50°C)

Operating humidity (ambient)

Max. 95% non-condensing

Storage temperature and humidity

-4°F to +122°F (-20°C to +50°C) Max. 95% non-condensing

Desiccant

4A molecular sieve

Warranty

24 months faulty workmanship and materials.

Logging

Integral data storage

Up to 300,000 date and time stamped readings

Stored in up to 20 user definable folders.

Logging frequency

User definable from 5 seconds to 1 hour.

Data display

Graphical and numerical

Real time logging

Can log directly to PC when connected via USB or Bluetooth.

Bluetooth

Bluetooth connectivity with compatible auxillary hardware, e.g. Printer.

* Continuous data logging with Power Saving On and Bluetooth OFF.

The SADPmini2-Ex in more detail

Dimensions



How to Order

Model SADPmini2-Ex - [XX] - [F] - [X] - [XX]

RANGE IN DEW POINT:

SR: -184°F to -4°F (-120°C to -20°C)

PL: -148°F to +32°F (-100°C to 0°C)

BL: -112°F to +68°F (-80°C to +20°C)

F: Standard Supply - Fir Tree Connector

4: 0.25" (1/4") - Swagelok SS Compression Type

6: 6 mm - Swagelok SS Compression Type

8: 0.125" (1/8") - Swagelok SS Compression Type

MAINS/AC PLUG TYPE - For Charger = XX

US: 2 Vertical Flat Blade

UK: Standard UK, 3 Square pin

EU: 2 Round Pins

AU: 2 Oblique Flat Blades with Ground



Fitting 1: Fir Tree Connector

Fitting 2: Compression Fitting



EXAMPLE: To order this instrument with a range of -112°F to +68°F dewpoint, 0.25" compression fitting, and a US AC power plug, the order code is:- **Model SADPmini2-Ex - BL - P - 4 - US**

Standard Accessories (Included with each instrument)

Included:

Anti-static carry bag with adjustable shoulder strap, 2m PTFE sample tube, adjustable lanyard, micro USB to USB communication battery/cell charger cable, universal 110/240 Vac charging plug, 4GB micro SD card, illustrated operating manual.



Optional Extras

Bluetooth Printer.



Portable Sample System.



Notes

Authorized Distributor Information

Distributed
throughout
USA / Canada by:



www.deltainstrument.com

Tel: New Jersey 201-768-7200
or 866-628-8457 Toll Free
Fax New Jersey: 201-768-5020

Corporate Office: 148 Veterans Drive,
Northvale, NJ 07647

Stoney Creek, Ontario, Canada
(Sales Office)
Telephone: 905-643-3500

Note: Model SADPmini2-Ex is ideal for most industrial gases including SF₆, but is not suitable for use in the presence of Ammonia (NH₃), Chlorine (Cl₂), Hydrogen Chloride (HCl), Hydrogen Fluoride (HF), Nitric Oxide (NO₂) and its hydrolysed form, Nitric Acid (HNO₃). Sulphur Dioxide (SO₂) can be monitored if the moisture content is low, less than 100ppm(v).

2499 Model SADPmini2-Ex pd260218-Iss2

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Product specification may be subject to change.