

# Model SADPmini2

## New Generation Hand Held Dewpoint Meter

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

- **Fast Repeatable Measurements**
- **LCD Color Screen - Real Time Graphics**
- **PC/Laptop User Software Included**

The reduced volume of the redesigned stainless steel desiccant head gives even more rapid spot check measurements.

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 scale for the main units. A single button press changes the display to a real time graph of the readings in the main units.



- |                 |                                     |
|-----------------|-------------------------------------|
| 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"/> |

Connection to a pc via USB also enables the user to modify and save the set up and save details via the pc. The optional logging package adds Bluetooth® communication as well as very powerful logging and graphing capabilities. A cell phone app is available for communication with Bluetooth® cell phones and tablets.

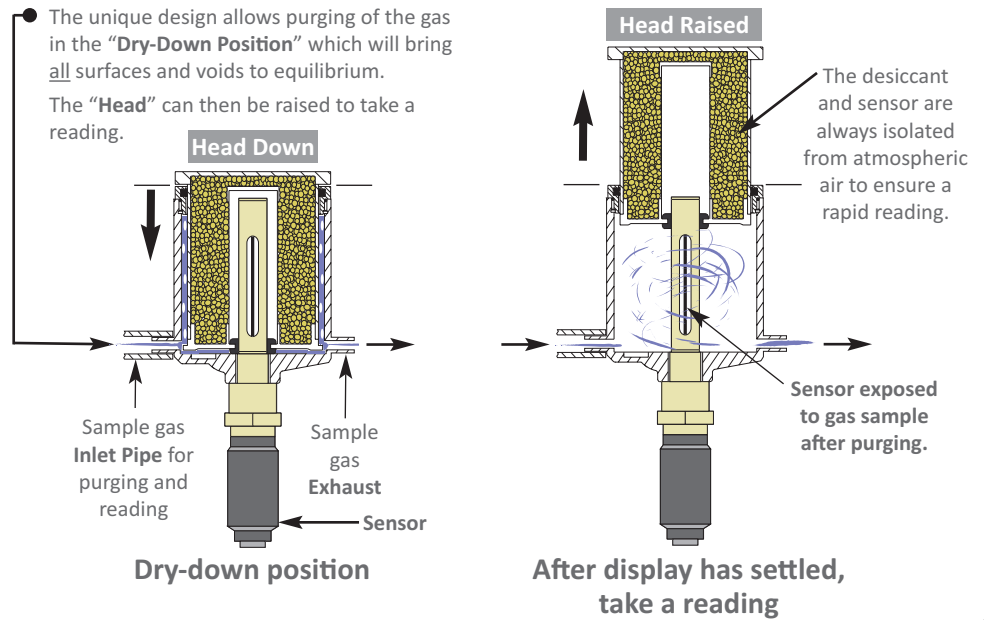
### KEY FEATURES

- 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/m<sup>3</sup> or lb/MMSCF.
- Cell 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 (optional)
- Bluetooth® communication included with logging option.
- Various ranges between -184°F and +68°F (-120°C and +20°C) dewpoint ensure the most appropriate choice for the application.
- Integral pressure dewpoint calculator.
- Full color graphics LCD display.
- Simultaneous display of two different selectable units.
- Light weight, 3.1 lbs (1.4 kg)
- Optional Carry Bag available.
- Ex certified version available: **See SADPmini2-Ex.**

## Desiccant Dry Down Technology

### The Desiccant Head Assembly

Keeping the sensor dry between tests ensures that the SADPmini2 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

### Sensor

#### 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 +20°F (-80°C to +20°C) dewpoint, **Blue**

#### Calibration

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

#### Accuracy

Better than  $\pm 3.6^\circ\text{F}$  ( $\pm 2^\circ\text{C}$  dewpoint)

#### Repeatability

Better than  $\pm 0.54^\circ\text{F}$  ( $\pm 0.3^\circ\text{C}$  dewpoint)

#### 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 colour LCD graphical display with backlight.

#### Power supply

Rechargeable Li-ion battery.

Charges from USB and universal mains charger supplied.

#### Cell life

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

#### Time to full charge

Empty to full, approx. 14 hours.

#### Warm up time

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.

**NB. Do not allow to exceed 4 psig (0.3 barg)**

#### Operating temperature (ambient)

14°F to +122°F (-10°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

Field replaceable.

### Warranty

**24 months faulty workmanship and materials.**

### Logging (Optional)

#### 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 provided with logging package.

The SADPmini2 in more detail

<b>OPTIONS:</b>		PRINTING	<input checked="" type="checkbox"/>
BLUETOOTH	<input checked="" type="checkbox"/>	PORTABLE	<input checked="" type="checkbox"/>
LOGGING	<input checked="" type="checkbox"/>	SAMPLE SYSTEM	<input checked="" type="checkbox"/>

Dimensions



How to Order

Model SADPmini2 - [XX] - [X] - [X] - [XX] - [X]

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)

TYPE (see specifications)

- B: Standard (No Logging, No Bluetooth®)
- L: With Logging and Bluetooth®

SAMPLE CONNECTION

- 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

BLUETOOTH® PRINTER

P: Printer (For logging versions)

CARRY CASE (Recommended)

CC: Carry Case

EXAMPLE:

To order this instrument with a range of -112°F to +68°F dewpoint, with logging and Bluetooth® capabilities, 0.25" pipe connection, a carry case and a Bluetooth® printer, the order code will look like this:-

**Model SADPmini2 - BL - L - 4 - CC - P**

Accessories

Included:

2m PTFE sample tube, adjustable lanyard, micro USB to USB communication/charger cable, universal 110/240 Vac charging plug, 4GB micro SD card, illustrated operating manual.

Optional:

- Carry Case (recommended) with adjustable shoulder strap.
- Bluetooth® Printer.
- Portable Sample System.



## Notes

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## Authorized Distributor Information

Distributed  
throughout  
USA / Canada by:



[www.deltainstrument.com](http://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** is ideal for most industrial gases, but is not suitable for use in the presence of Ammonia (NH<sub>3</sub>), Chlorine (Cl<sub>2</sub>), Hydrogen Chloride (HCl), Hydrogen Fluoride (HF), Nitric Oxide (NO<sub>2</sub>) and its hydrolysed form, Nitric Acid (HNO<sub>3</sub>). Sulphur Dioxide (SO<sub>2</sub>) can be monitored if the moisture content is low, less than 100ppm(v).

2306 Model SADPmini2 211217-Iss1

Alpha Moisture Systems Limited.  
Registered Office: Alpha House,  
96 City Road, Bradford,  
West Yorkshire, BD8 8ES. UK.



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© Alpha Moisture Systems Ltd.

Tel +44 (0) 1274 733100

Fax +44 (0) 1274 733200

Email [info@amsystems.co.uk](mailto:info@amsystems.co.uk)

Website [www.amsystems.co.uk](http://www.amsystems.co.uk)

Product specification may be subject to change.