SADPmini2-Ex

Intrinsically Safe Portable Dewpoint Hygrometer

ATEX

Features and Benefits

- Certified Intrinsically Safe to IECEx, ATEX, cULus for use in hazardous areas
- Ultra-high capacitance aluminium oxide sensor delivers unsurpassed sensitivity, speed of response, accuracy, repeatability, stability, and long service life
- AutoCal span correction
- Various dewpoint ranges available, -110 °C to +20 °C
- Unique desiccant dry-down technology always shields the sensor from ambient air, reducing response time to minutes
- Colour graphical LCD with dual display of measuring units °C or °F dewpoint, ppm(v), ppm(w), mg/m^3 or lb/MMSCF
- Integral calculator for display of dewpoints at pressure
- User interface in ten languages: English, French, German, Spanish, Italian, Portuguese, Russian, Chinese, Japanese & Korean
- Can connect wirelessly to a mobile device using Bluetooth or to a laptop using USB to view live display, analyse, and archive data on dedicated App.
- On-board data logging and screen capture
- Accuracy ±2 °C dewpoint
- IP66 / NEMA 4X rated
- Battery life over 150 hours continuous use
- Supplied with a calibration certificate traceable to National and International Humidity standards

The SADPmini2-Ex is certified Intrinsically Safe to IECEx, ATEX, and cULus for use in hazardous areas. Rugged, lightweight, and rated to IP66 / NEMA 4X, the SADPmini2-Ex is designed for spot-checking dewpoint in gases, dry compressed air, and dry rooms/chambers.

The optional Portable Sample System (PSS) is available for regulating and conditioning pressurised gas samples.

SADPmini2-Ex Technical Data

INTRINSIC SAFETY CERTIFICATION

BAS21UKEX0806. Baseefa 16ATEX0084. IECEx BAS 16.0067. and UL 20170421 - E486241

ATEX , IECEx and UKCA

II 1G Ex ia IIC T4 Ga (-20°C ≤ Ta ≤ +50°C)
II 2D Ex ia IIIB T60°C T$_{50}$80°C Db (-20°C ≤ Ta ≤ +50°C)

UL Markings:

INTRINSICALLY SAFE / SÉCURITÉ INTRINSÈQUE Exia Class I Div 1 Groups A, B, C and D.

Sensing Element	Ultra-High Capacitance Aluminium Oxide
Power Supply	Rechargeable Li-ion battery. Over 150 hours of continuous use from a full charge
Dewpoint Ranges	Range -110 °C to -20 °C Dewpoint Range -100 °C to 0 °C Dewpoint Range -80 °C to +20 °C Dewpoint
Intrinsic Safety	Certified Intrinsically Safe to IECEx, ATEX, cULus for use in hazardous area
Electromagnetic Compatibility (EMC)	Complies with BS EN ICE 61326-1
Accuracy	± 2 °C dewpoint (NPL traceable for range -90 °C to +20 °C)
Repeatability	Better than ±0.3 °C dewpoint
Operating Pressure	Atmospheric pressure
Operating Temperature (Ambient and Process)	-20 °C to 50 °C
Operating Humidity (Ambient)	Maximum 95% Non-Condensing
Storage Temperature and Humidity	-20 °C to 50 °C Maximum 95% Non-Condensing

Field Calibration	AutoCal span check and correction are performed by following simple on-screen instructions. We recommend AutoCal is repeated every 2-3 months
Factory Calibration	Supplied with a calibration certificate traceable to National and International Humidity standards. We recommend annual laboratory calibration
Sample Flow Rate	Flow independent, ideally 5 to 15 Litres per minute, maximum 20 L/min
Weight	1.4 kg
Dimensions	Height 215 mm, Width 108 mm, Depth 124 mm
Ingress Protection	IP66 / NEMA 4X
Manufacturer's Warranty	12 months in case of defective parts or faulty workmanship

How to Order

SADPmini2-Ex - [XX] - [X] - [X] - [XX]

RANGE IN DEWPOINT:
[SR] -110 °C to -20 °C (-166 °F to -4 °F)
[PL] -100 °C to 0 °C (-148 °F to +32 °F)
[BL] -80 °C to +20 °C (-112 °F to +68 °F)

SAMPLE CONNECTION
[F] Fir Tree Fitting
[4] 0.25" (1/4") - SS Compression Fitting
[6] 6 mm - SS Compression Fitting
[8] 0.125" (1/8") - SS Compression Fitting

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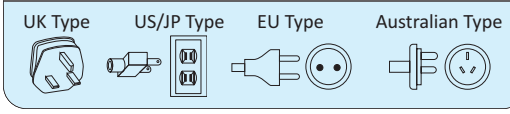
MAINS/AC PLUG TYPE
[UK] USB Charger complete with UK Plug
[US] USB Charger complete with US/JP Plug
[EU] USB Charger complete with EU Plug
[AU] USB Charger complete with AU Plug



ORDER EXAMPLE:
To order this instrument with a range of -100 °C to 0 °C dewpoint, 6mm compression fitting, Fir Tree Fitting, an EU AC power plug, the order code is:-
Model SADPmini2-Ex - [PL]-[6]-[F]-[EU]

Included Accessories

Anti-static carry bag with adjustable shoulder strap
2m PTFE Sample Pipe
Pipe Fittings
Mains Battery Charger & Cable
Adjustable Carrying Strap
Logging Software
Pressure Dewpoint Calculator Wheel

Optional Accessories

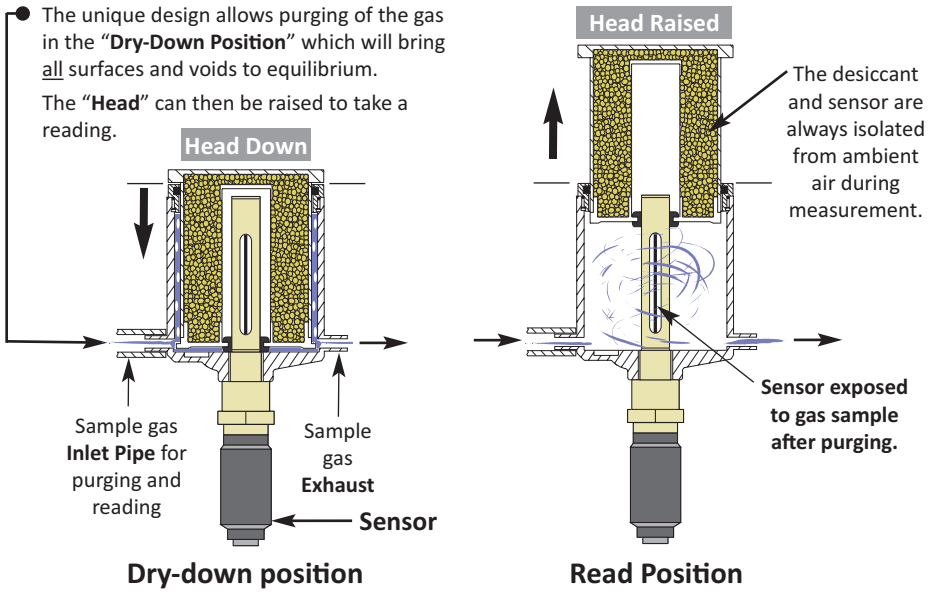
Bluetooth Printer

Portable Sample System

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.



Corrosive Gases: The Sensor should not be exposed to corrosive gases (or corrosive contaminants in the gas sample) as these can chemically attack the sensor, impairing calibration accuracy and/or damaging it beyond economic repair. Examples of such gases are mercury (Hg), ammonia (NH_3), chlorine (Cl_2) etc. Strong oxidising agents such as ozone (O_3) should also be prevented from coming into contact with the sensor.

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BS EN ISO 9001:2015

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