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2359 SADPmini2 Quick Start Guide – Issue 3

Alpha Moisture Systems

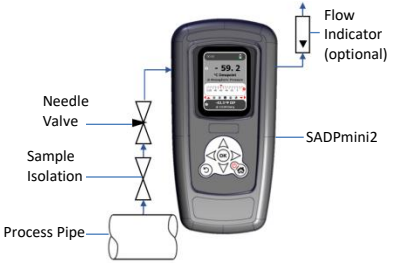
Model SADPmini2 / SADPmini2-Ex Dewpoint Hygrometer

Quick Start Guide

Clean Gas < 10 Bar

Reduce positive pressure gas to atmospheric pressure.

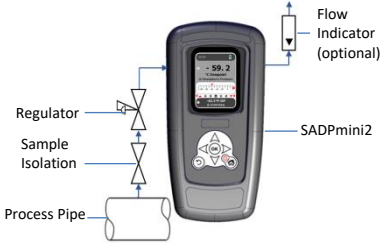
Use a needle valve at low pressures (<10 barg) to control flow and pressure drop.



Clean Gas > 10 Bar

Reduce positive pressure gas to atmospheric pressure.

Use a stainless steel, low swept volume pressure regulator at higher pressures (>10 barg).

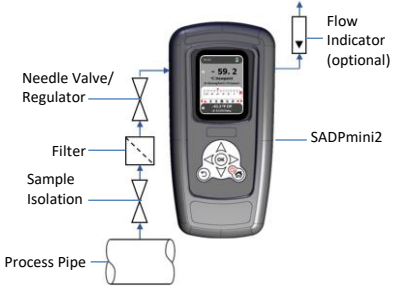


Gases with Particulate/ Liquid Contamination

Filter all particulate matter. Use a coalescing filter (with drain) for heavy hydrocarbon condensate samples.

Hygroscopic particulate (desiccant dust) must achieve moisture concentration equilibrium which may cause a buffering effect and delay the sample result. Hygroscopic liquid (glycol) may accentuate the buffering effect (as above) and render the sensor too slow to use.

Install the filter as close to the sample point as practical



1. Install the sample piping system and equipment as per the required installation configuration.
   NOTE: The SADPmini2 is not connected to the inlet piping system at this stage.
2. Open the sample Isolation Valve and adjust the needle valve/ regulator to allow a flow of 5-15 litres per minute to atmosphere through to sample pipe.
3. Allow the gas to flow through the sample pipe for 2 minutes to purge the system.
4. After ensuring that the sample gas is clean and dry connect the sample pipe to the instrument.
   NOTE: The orientation of the ports is not important.
5. When the sample flow is low or very dry gas is being measured connect a >20 cm pipe to the outlet port to prevent back diffusion.
6. Allow the gas to flow through the SADPmini2 for two minutes.
7. Press the power button on the SADPmini2 and ensure that the sensor is 'dry'.
8. Block the instrument outlet, e.g. cover with a finger and allow the Desiccant Head to extend fully.
   NOTE: Do not lift the Desiccant Head manually as this will draw ambient air into the sample chamber and produce a false reading.
9. Unblock the outlet and allow the gas to flow through the sensor.
10. The displayed reading will rise until the sensor is in equilibrium with the sample gas.
11. When the displayed reading has settled record the final reading.
12. When completed manually depress the Desiccant Head fully.
    NOTE: It is important to make sure the Desiccant Head is depressed fully when the equipment is not in use to prevent the sensor and desiccant material becoming saturated.
13. Close the sample Isolation Valve.
14. Press and hold the power button for two seconds to switch off the SADPmini2.
15. Disconnect the pipework from the SADPmini2.

DO NOT

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.

DO NOT

Do not allow the pressure in the instrument to exceed 0.3 barg/ 4 psi

WARNING

Do not exceed a flow rate of 20 litres per minute

Navigation Keys allow the user to access and change the following:

- Time and Date settings
- International settings
- Dewpoint and concentration units
- Power saving options

See the user manual for details