Alpha Moisture Systems

Model SADPmini2 / SADPmini2-Ex Dewpoint Hygrometer

Quick Start Guide



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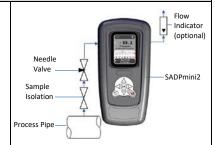
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Clean Gas < 10 Bar

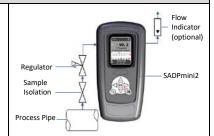
Reduce positive pressure gas to atmospheric pressure.

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



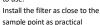
Clean Gas > 10 Bar

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.





- 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.
- 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.
- 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.
- 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.
- Press the power button on the SADPmini2 and ensure that the sensor is 'dry'.
- 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.
- 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.
- 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 (NH₃), chlorine (Cl₂) etc. Strong oxidising agents such as ozone (O₃) 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