

Model SWS-SD3 Weatherproof Sample System

The Model SWS-SD3 weatherproof sample system is designed for gas or general compressed air sampling and allows the sensor to be operated at ideal sampling conditions.

Housed in an IP65 weatherproof cabinet, the Model SWS-SD3 combines pressure regulation, filtration and flow control. The dewpoint meter (as illustrated here) is housed inside the cabinet protecting it from the elements.

Electrical connections are through 1 x STB 16 gland (mains) and 3 x M13 glands (signal lines) to terminal rail. Pneumatic connections to 3 x 1/8" NPT bulkhead fittings with a choice of 1/4", 1/8" or 6 mm compression fittings if required.



Features

- Allows sensor to operate at atmospheric pressure
- Designed for gas or general compressed air sampling
- Combines pressure regulation, filtration and flow control
- Dewpoint meter protected from the elements when housed inside the cabinet
- IP65 weatherproof
- Wall or pedestal mounting
- Choice of compression fittings

Specifications

- Accuracy**

Meter: 1% across meter range

Sensor: For sensor accuracy see sensor specification sheet

- Type**

IP65 weatherproof housed inline hygrometer, for wall or pedestal mounting, including Superdew 3 meter and sample system comprising three port sample selection valve, filter unit, pressure regulator, flow indicator, sensor holder and sensor.

Electrical connections through 1 x STB 16 gland (mains) and 3 x M13 glands (signal lines) to terminal rail.

Pneumatic connections to 3 x 1/8" NPT bulkhead fittings with a choice of 1/4", 1/2" or 6 mm compression fittings if required.

- Overall Dimensions**

400 mm (w) x 400 mm (h) x 200 mm (d)

- Weight**

11.3 kg

- Display**

5 character LED

- Sensor Connection**

Low loss coax cable (75 ohms max capacitance of 50pF per metre)

- Power Supply**

110 or 220 V AC single phase 50 or 60 Hz, 24 V DC

- Sampling**

Input Pressure (pr): 200 Bar (Med), 400 Bar (Hi)

- Outputs**

Alarms: Two single pole changeover contacts (NO/C/NC), rated at 10 A at 240 V AC. Alarm trip at set point with 0.1 °C (or equivalent) hysteresis to eliminate relay chatter.

Signal: Isolated 4 - 20 or 0 - 20 mA Linear

- Calibration**

AutoCal on all but Blue range

- Sensor Type (r) Sensor Range:**

P (Purple): -100 / 0 °C DP, 0 - 6,000 ppm

R (Red): -80 / -20 °C DP, 0 - 1,000 ppm

G (Grey): -80 / 0 °C DP, 0 - 6,000 ppm

B (Blue): -80 / +20 °C DP, 0 - 23,000 ppm (ManualCal)

Ordering Information

Model SWS-SD3-(R)-(F)-(F)

Select required range = R:

P (Purple):	-100 to 0 °C dewpoint	0-6000 ppm(v)
R (Red):	-80 to -20 °C dewpoint	0-1000 ppm(v)
G (Grey):	-80 to 0 °C dewpoint	0-6000 ppm(v)
B (Blue):	-80 to +20 °C dewpoint	0-23,000 ppm(v)

Select required input pressure = (PR)

Med: 200 Bar **Hi:** 400 Bar

Select inlet and outlet connection fittings size (1/4" fittings supplied as standard) = F:

Inlet Fitting:	4: 1/4"	8: 1/8"	6: 6 mm
Outlet Fitting:	4: 1/4"	8: 1/8"	6: 6 mm

Example:

To order a Model SWS-SD3 with a measuring range of -80 to 0 °C dewpoint (grey sensor), 200 Bar, with 1/4" inlet and 1/4" outlet fittings, please order as **SWS-SD3-G-Me-4-4**

Related Products

Superdew3

A single channel on-line hygrometer designed to measure dewpoint in process gases and compressed air, providing an overall system accuracy of ±2 °C (±3.6 °F). The panel mounted enclosure provides panel protection to IP54.



The Superdew 3 can be user configured to display in °C, °F, ppm(v) or lbs/MMscf on an easy to read five character LED display. An isolated 4 - 20 mA analogue output is supplied as standard. The span of this output can be configured across the range of the sensor. The system allows for the Superdew 3 instrument to be sited in excess of 1,000 metres from the sensor.

Model SU4 - Sample Conditioning Unit

The Model SU4 sample conditioning unit provides ideal sample conditions reducing the pressure from the dryer to give a pressure and flow suitable for measurement. The SU4 combines a pressure regulator, sensor holder and a flow meter mounted on a stove enamelled back plate.



The Model SU4 comes with pneumatic connections with a choice of 1/4", 1/2" or 6 mm compression fittings for inlet and outlet.

Includes as standard:

Superdew 3 meter, sample system comprising a three port sample selection valve, filter unit, pressure regulator, flow indicator, sensor holder, sensor, pressure calculator and screw driver.