

# 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  $\frac{1}{8}$ " NPT bulkhead fittings with a choice of  $\frac{1}{4}$ ",  $\frac{1}{8}$ " 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  $\frac{1}{3}$ " NPT bulkhead fittings with a choice of  $\frac{1}{3}$ ",  $\frac{1}{3}$ " 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

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  $^{\circ}$ 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:

<b>P</b> (Purple):	-100 / 0 °C DP, 0 - 6,000 ppm
<b>R</b> (Red):	-80 / -20 °C DP, 0 - 1,000 ppm
<b>G</b> (Grey):	-80 / 0 °C DP, 0 - 6,000 ppm
<b>B</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)
<b>R</b> (Red):	-80 to -20 °C dewpoint	0-1000 ppm(v)
<b>G</b> (Grey):	-80 to 0 °C dewpoint	0-6000 ppm(v)
<b>B</b> (Blue):	-80 to +20 °C dewpoint	0-23,000 ppm(v)
	(22)	

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:	<b>4:</b> ¼″	<b>8:</b> 1⁄8″	<b>6:</b> 6 mm
Outlet Fitting:	<b>4:</b> ¼″	<b>8:</b> 1⁄8″	<b>6:</b> 6 mm

Example:

To order a Model SWS-SD3 with a measuring range of -80 to 0 °C dewpoint (grey sensor), 200 Bar, with  $\frac{1}{2}$ " inlet and  $\frac{1}{2}$ " 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  $\pm 2$  °C ( $\pm 3.6$  °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  ${\cal V}_4'',\,{\cal V}_8''$  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.

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