

## Sentry- Compressed Gas Alarm System

**APPLICATION:** The **SENTRY** is designed to **detect low pressure or high dew point conditions** within compressed air / dryer systems. It is typically installed at the main compressor/ dryer header, but in many moisture sensitive processes, the Sentry is also installed at the point of use.

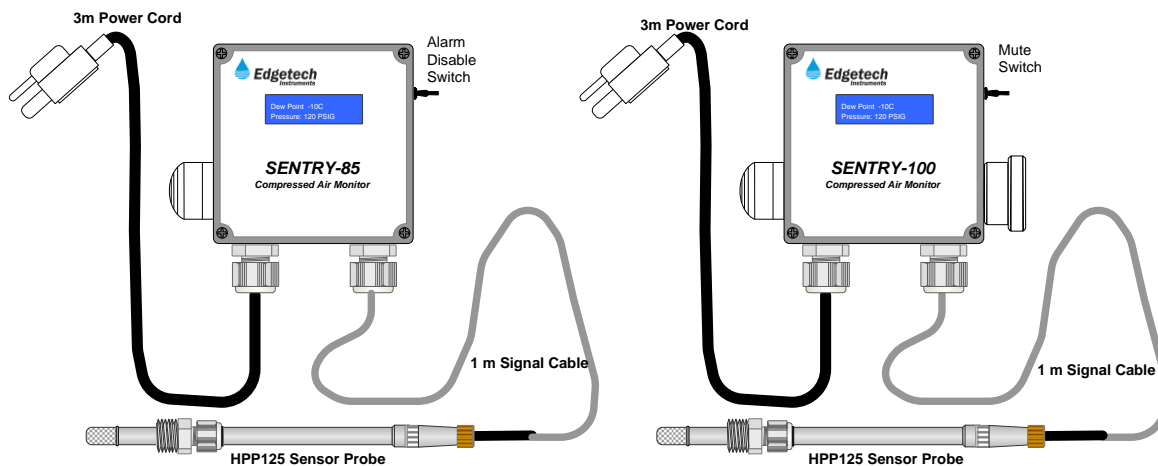
**DESCRIPTION:** The SENTRY system continuously monitors both pressure and dew point and provides a **warning system** to alert an operator should there be a pressure loss or dryer failure. It consists of a display control module, signal cable and a *SMART, Multi-Sense Probe*. Using the supplied 1/2 inch Male NPT pipe fitting, the probe is inserted directly within the compressed air system header, accumulator tank, or at the point of use. To facilitate maintenance and maintain safety, we highly recommend the use of the **CAM** compressed air module. The CAM provides a tap point into the sample point (3/4 inch female pipe thread) via a ball valve that allows you to isolate the Probe from the pressurized process during servicing. Another feature of the CAM is the secondary metering valve that allows you to draw off a very small, metered sample of gas past the Sentry probe for measurement of pressure and dew point.

The SENTRY includes the following:

- Two Line Display indicating DewPoint, Pressure, and Temperature
- Factory Set Alarm Points for pressure and dew point
- Simulated Strobe & Pulsed Beep for Loss of pressure or High Dew Point (based on the set points)
- Universal Power Supply (90-240VAC, 50/60Hz) with 10' (3 meter) power cord, installed
- 3' (1 meter) long smart sensor probe cable, installed
- HPP125 multi-sense probe with sintered metal filter (100 micron)
- (2) 4-20mA output signals: (1) for pressure and (1) for Dew Point, factory set
- (1) alarm relay contact (C, NO) for loss or pressure/ high dew point alarm, factory set
- IP65 (water resistant) design
- RS-232 serial interface available for reconfiguration of alarms or 4-20mA output
- Model 85 features 85dB audible pulsed beep; Model 100 features 100dB audible pulsed beep
- Model 85 features alarm disable switch; Model 100 features audible mute switch
- Operation/ Installation manual, 1 year Limited Warranty, & NIST Traceable Calibration Certificate

### SENTRY 85: strobe light and 85dB Audible Alarms

### SENTRY 100: strobe light and 100dB Audible Alarms



**Notes/ Sampling Configuration Options**

1. The HPP125 Probe comes standard with a 1/2 inch NPT male fitting. This can be inserted directly into the pressurized gas stream or it may be used in conjunction with the CAM sample extraction unit.
2. The Sentry features **two relay alarms**.
  - a. Alarm 1 is used by the Sentry to control the horn and strobe and is unavailable for customer connections.
  - b. Alarm 2 is available for customer use.
  - c. Factory setting is Alarm 1 and 2 to be identical and trigger upon low pressure or high dew point conditions. However, the logic for each alarm may be field configured to work independently of each other. For example, Alarm 1 could be left with factory setting with low pressure and high dew point setting but alarm 2 could be set to trigger only on low pressure. The trigger conditions for each alarm can be set to any combination of pressure only, dew point only, or pressure and dew point.
3. The CAM unit provides a sample valve that allows isolation of the probe from the pressurized process for maintenance.
4. There are no attitude restrictions for sensor probe or display control module mounting.
5. The SENTRY features a mute switch that will silence the horn while keeping the strobe lamp active.
6. The Sentry may be located at multiple points along the path of the pressurized gas stream to be monitored. This may be useful to sense upset conditions at point of use to prevent sensitive process or equipment failures.

**How to order the Sentry System**

1. Determine the alarm set points for Dew Point and Pressure. Factory settings are 80 PSIG & -20°C DewPoint (pressure drifts below 80 psig and/or dew point creeps above -20C triggers alarm)
2. Determine if you want the Dew Point Units in °C or °F. Factory setting is C
3. Determine if you want the Pressure Units in PSIG or BAR. Factory Setting is PSIG.
4. Determine the preferred method of mounting the HP125 sensor probe. Standard is 1/2" male NPT
5. *List as separate line items additional choices such as CAM, Accessories and Spare Parts.*

**SENTRY85-**  -  **Base Price: \$1,950.00**  
Pressure Setpoint      Dew Point Setpoint

**SENTRY100-**  -  **Base Price: \$2,249.00**  
Pressure Setpoint      Dew Point Setpoint

For Example: **SENTRY85-75PSIG – 10F** would be a Sentry 85 unit with a low pressure alarm set to 75 psig and the high dew point alarm set to +10°F.

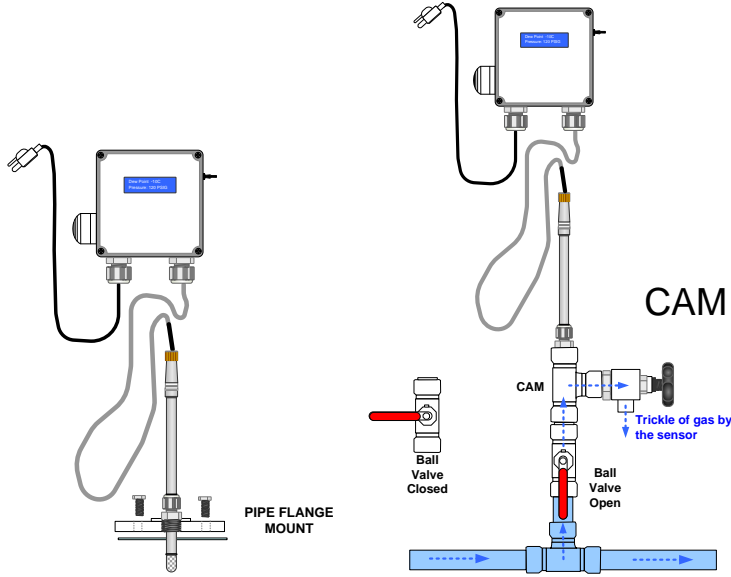
**OPTIONAL ACCESSORIES/ SPARE PARTS (Not included in above prices)**

<b>HPP125</b>	Spare Probe 316 SS Probe body including the 4point sensor tip, filter cap, and NPT fitting (please specify ½ Male NPT or ¾ Male NPT) comes calibrated with data stored in the probe in on-board memory- upon installation, the Sentry Module will recognize the probe and download all calibration factors. Probe comes with NIST traceable calibration certificate. Comes with installation manual.	<b>\$1,100.00</b>
<b>HPP-TIP</b>	Spare smart sensor tip, includes NIST Traceable Certificate	<b>\$ 480.00</b>
<b>HPFIL</b>	Spare Filter for the HPP125 probe, 100 micron	<b>\$ 112.00</b>
<b>CAM</b>	Compressed Air Module: Extracts gas sample & provides isolation of the probe from the process	<b>\$ 395.00</b>
<b>3/4A</b>	¾ inch Male NPT probe penetration fitting	<b>\$ 45.00</b>
<b>1A</b>	1 inch Male NPT probe penetration fitting	<b>\$ 45.00</b>
<b>FSS</b>	SS Pipe Flange Mount w/ Gasket, Rated for 300 PSIG, The HP125 gets installed into a 3.75 inch diameter 304 SS Threaded Pipe Flange, 4 bolt install, includes rubber gasket	<b>\$ 187.00</b>
<b>FPVC</b>	Dark Gray PVC Pipe Flange Mount w/ Gasket, Rated for 150 PSIG, The HP125 gets installed into a 3.5 inch diameter PVC Threaded Pipe Flange, 4 bolt install, includes rubber gasket.	<b>\$ 75.00</b>

**OPTIONAL ACCESSORIES/ SPARE PARTS (continued)**

<b>Programmer Kit</b>	Includes USB cable connection/ software/ manual kit for connection to PC. Used to change setpoints or access setup of the Sentry. This kit contains the RSCBL and USB.	<b>\$ 155.00</b>
<b>RSCBL</b>	RS-232 Single Ended Serial Cable for Programming w/ manual	<b>\$ 45.00</b>
<b>USB</b>	Converts Serial output to USB, comes with software disk	<b>\$ 110.00</b>
<b>SERIALDAQ</b>	Captures serial output (TXT) into USB memory Stik (can be captured into EXCEL)	<b>\$ 350.00</b>
<b>2M</b>	2 meter (approximately 2 feet long) signal cable, replaces the 1 meter cable	<b>\$ 75.00</b>
<b>5M</b>	5 meter (approximately 15 feet long) signal cable, replaces the 1 meter cable	<b>\$ 175.00</b>
<b>20M</b>	20 meter (approximately 60 feet long) signal cable, replaces the 1 meter cable	<b>\$ 250.00</b>

The SENTRY is available in 24 VDC power- Specify SENTRY85-24VDC or SENTRY100-24VDC, same prices apply as above



**Spare Tip & Filter**

