



APPLICATION NOTE

2016_03-02 SENTRY Rev 2



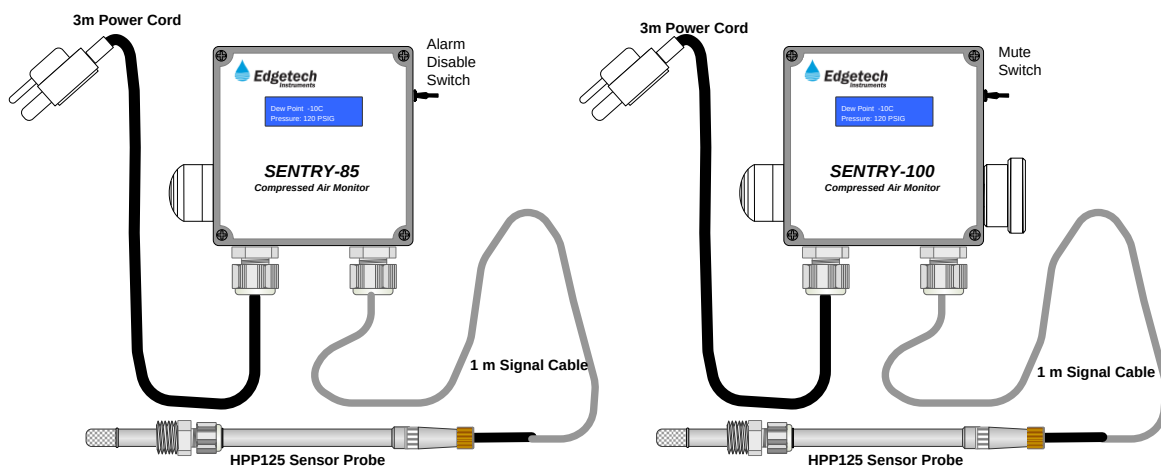
Using the **SENTRY** Compressed Gas Alarm System

The **SENTRY** is designed to **detect low pressure or high dew point conditions** within compressed air or inert gas systems. It consists of a display control module and a *SMART, Multi-Sense Probe*. Using the supplied ½ inch Male NPT pipe fitting, the probe is inserted directly within the compressed air system header, accumulator tank, or at the point of use. 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.

There are two models available:

SENTRY 85: strobe light and 85dB Audible Alarms

SENTRY 100: strobe light and 100dB Audible Alarms



IMPROVE reliability of compressed air/ dryer systems

REDUCE maintenance expenses by identifying problems before they happen

ELIMINATE corrosion, product loss or process damage because of high moisture

The **SENTRY** offers many standard features including:

- Plug n' Play Operation: typical options are standard
- HPP125 Multi-Sense Smart Probe: Pressure and Calculated Dew Point
- Arrives with NIST Traceable Calibration Certificate
- Smart sensor tip is easily replaced- no need to send in for calibration
- Smart Sensor tip comes with NIST traceable certificate, replace – Plug n' Play
- Simulated Strobe Lamp / Audible Alarm for low pressure or high dew point condition
- Universal VAC Power Supply with 3 meter length power cord
- 1 meter length signal cable with quick connection to the Smart Probe
- Local Digital Display of Pressure, Dew Point, and Temperature
- Two 4-20mA Analog Outputs: Pressure and Dew Point & RS-232 Serial Interface
- One User Accessible alarm relay for low pressure/ high dew point

Edgetech Instruments Inc.

An ISO 9001 Certified Company

399 River Road . Hudson . MA . 01749

Main: +1 (508) 263-5900 . Fax: +1 (508) 486-9348

www.edgetechinstruments.com

Benefits

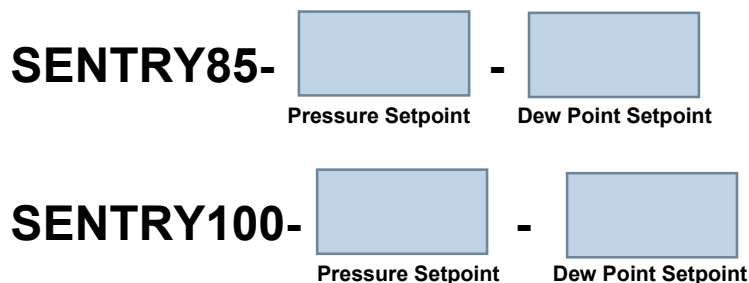
- Detect Dryer Failures
- Detect Compressor failures or system leaks
- Protect downstream processes and pneumatic equipment
- Ensure Protection at the source or at point of use
- No wait for annual calibration- just replace the smart sensor tip

Notes/ Sampling Configuration Options

1. The HPP125 Probe comes standard with a 1/2inch 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 CAM sample extraction unit provides a sample valve that allows isolation of the HPP125 probe from the pressurized process for sensor tip replacement or maintenance.
3. There are no attitude restrictions for sensor probe or display control module mounting.
4. Maximum power requirements for the SENTRY system are less than 0.5 AMP at 110 VAC.
5. The SENTRY 85 features an alarm disable switch that will mute the horn and disable the strobe lamp.
6. The SENTRY 100 features a mute switch that will mute the horn. The strobe lamp will remain active.
7. 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.
8. Remote monitoring of the SENTRY condition is available through the 4-20mA analog output signals provided for both pressure and dew point.
9. Although no alarm condition is triggered, the SENTRY also monitors and displays the sample gas temperature.
10. The SENTRY arrives factory set but you can adjust the set points in the field using a serial interface.

How to order the Sentry System

1. Determine the alarm set points for Dew Point and Pressure.
2. Determine if you want the Dew Point Units in C° or F°
3. Determine if you want the Pressure Units in PSIG or BAR.
4. Determine the preferred method of mounting the HPP125 sensor probe.
5. [List as separate line items additional choices such as CAM, Accessories and Spare Parts.](#)



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.

Edgetech Instruments Inc.

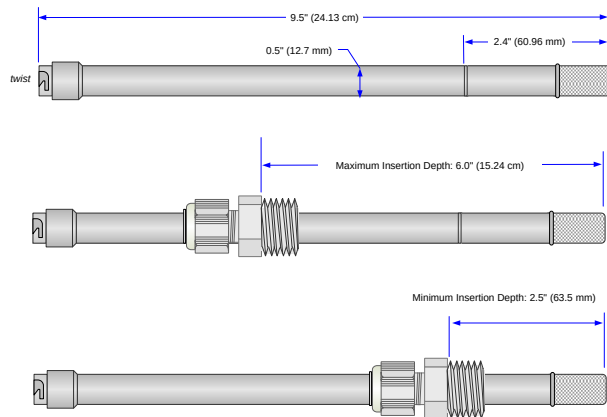
An ISO 9001 Certified Company

399 River Road . Hudson . MA . 01749

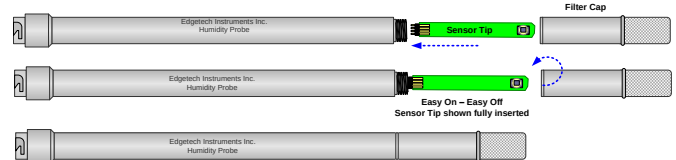
Main: +1 (508) 263-5900 . Fax: +1 (508) 486-9348 . www.edgetechinstruments.com

Installation:

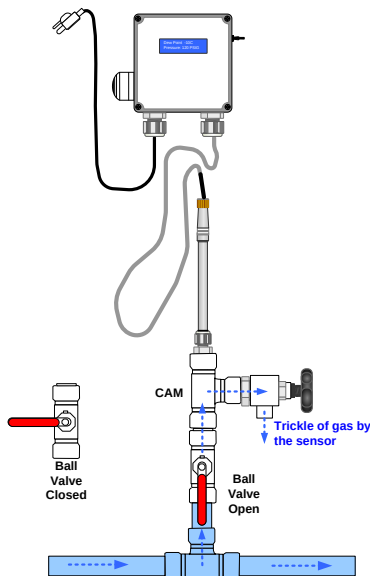
1. The SENTRY features a standard 1/2inch male NPT fitting on the HPP125 probe for connection to the process point. The 3/4 inch fitting is optional and may be ordered as an accessory.
2. The HPP125 probe may be mounted directly into the process take-off point or may be installed to extract a small sample of gas (less than 1CFH) using the CAM accessory.
3. Mount the SENTRY display in a conspicuous area for easy viewing.
4. Mount the HPP125 probe in an easy to access area.



Replacing the Sensor Tip

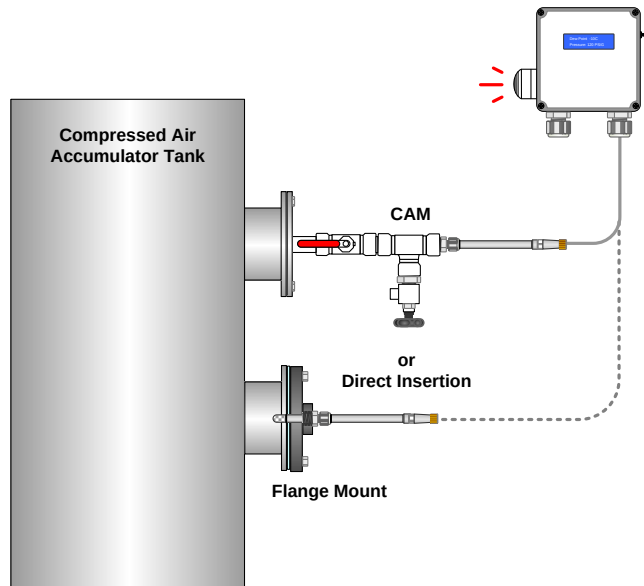


Using the optional CAM Module in an air header



Using the CAM at the accumulator tank or

Direct Insertion of the Probe into tank

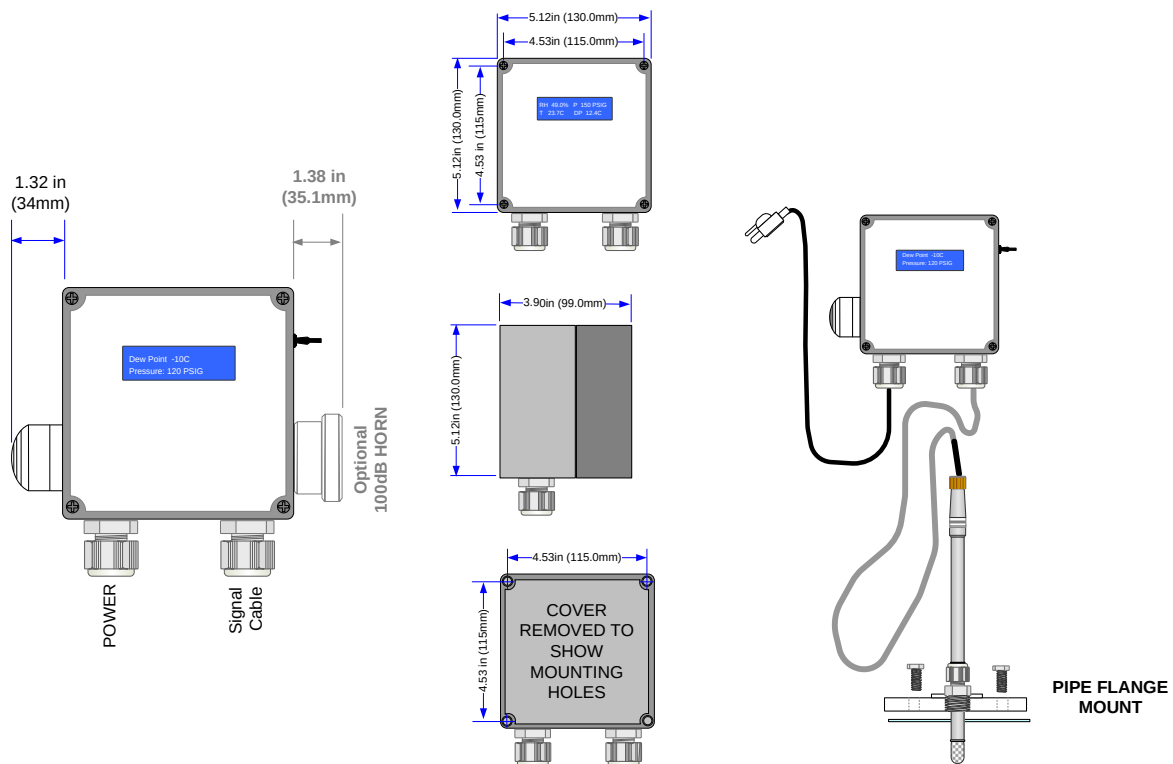


Edgetech Instruments Inc.

An ISO 9001 Certified Company

399 River Road . Hudson . MA . 01749

Main: +1 (508) 263-5900 . Fax: +1 (508) 486-9348 . www.edgetechinstruments.com



Edgetech Instruments Inc.
An ISO 9001 Certified Company

399 River Road . Hudson . MA . 01749

Main: +1 (508) 263-5900 . Fax: +1 (508) 486-9348 . www.edgetechinstruments.com