

# SENTRY

## Compressed Air Monitoring and Alarm System

The Edgetech Instruments SENTRY turn-key measurement and alarm system features a smart multi-sense probe that continuously monitors the dew/frost point and pressure of compressed air systems to detect compressor or dryer failures and system pressure leaks.

The SENTRY features a strobe lamp and pulsing horn plus an alarm relay contact that activate when a programmable, low pressure or high dew/frost point alarm trip point is detected. Either condition triggers the alarms. It also has a local display of the measured pressure and dew/frost point of the compressed air system plus 4 to 20 mA analog outputs, one each for measured pressure and dew/frost point at atmospheric pressure. The SENTRY is a complete system, ready for out-of-the-box installation.

All Edgetech Instruments dew/frost point monitors are manufactured and supported in the USA in a modern, ISO 9001:2015 registered facility with ISO/IEC 17025:2005 accredited calibration laboratory.



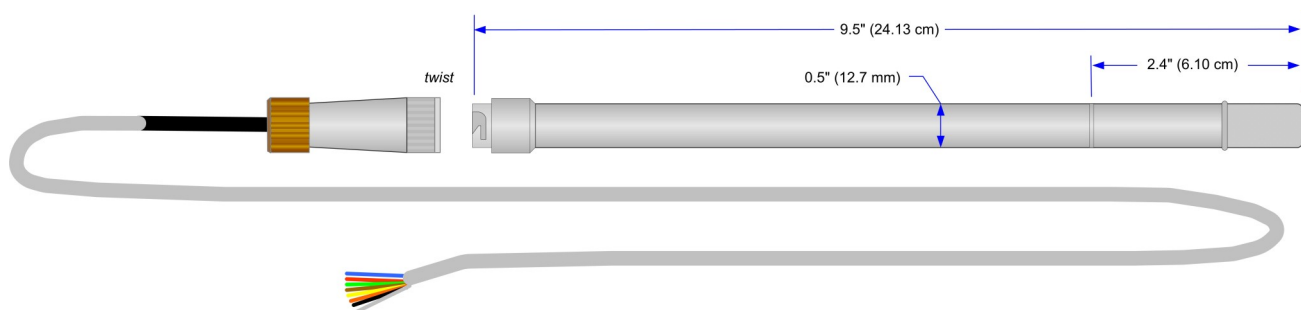
[Click](#) for the SENTRY Application Note

### Features:

- Detects upset conditions in compressed air systems
- Constantly monitors pressure and dew/frost point temperature
- Strobe lamp and pulsing audible alarms for low pressure or high dew/frost point alert
- Displays dew/frost point and pressure on panel meter
- NIST traceable calibration certificate
- Field replaceable Smart Sensor Tip
- Alarm relay and 4 to 20 mA outputs
- Complete system, ready for installation

### Applications:

- Compressed air headers
- Point of use compressed air
- Dry air systems for critical process
- Monitoring fluidized bed dryers
- Monitoring instrument air systems
- Pharmaceutical packaging
- Laboratories and clean rooms
- Sensitive product storage
- Monitoring purge delivery systems



The SENTRY Dew/Frost Point and Pressure Probe

 **Edgetech Instruments**

ISO/IEC 17025:2005 Accredited  
ISO 9001:2015 Registered

## Technical Specifications

### Specifications:

#### Models:

**SENTRY 85:** Provides strobe lamp and 85 dB pulsing audible alarm when high dew/frost point or low pressure condition is detected

**SENTRY 100:** Provides strobe lamp and 100 dB pulsing audible alarm when high dew/frost point or low pressure condition is detected

#### Measuring Range (HPP125 Sensor Probe):

Standard Dew/Frost Point:  $-40^{\circ}\text{C}$  to  $+95^{\circ}\text{C}$   
( $-40^{\circ}\text{F}$  to  $203^{\circ}\text{F}$ )

Low Dew/Frost Point:  $-60^{\circ}\text{C}$  to  $+95^{\circ}\text{C}$   
( $-76^{\circ}\text{F}$  to  $203^{\circ}\text{F}$ )

Pressure: Up to 400 psia (0 to 27.6 bar)

#### Accuracy:

Dew/Frost Point:  $\pm 1^{\circ}\text{C}$  for  $-10^{\circ}\text{C}$  to  $95^{\circ}\text{C}$   
and  $\pm 2^{\circ}\text{C}$  for  $-60^{\circ}\text{C}$  to  $-10^{\circ}\text{C}$

Pressure: At  $25^{\circ}\text{C}$ ,  $\pm 1$  mbar from 600 to 1200 mbar; over  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  range,  $\pm 5$  mbar

#### General:

Enclosure: IP65 water resistant/dust tight

Dimensions: 5 in H x 5 in W x 4 in D  
(127 mm H x 127 mm W x 102mm D)

Weight: 3 lb. (1.4 kg)

Display: 2 Line LCD display of pressure and dew/frost point, LED Backlit

Operating Temp.:  $32^{\circ}\text{F}$  to  $122^{\circ}\text{F}$  ( $0^{\circ}$  to  $50^{\circ}\text{C}$ )

Smart Sensor Probe: Connected to control module via 1 meter cable with quick connect

Sample Connection: 1/2" Male NPT pipe fitting;  
Optional 3/4" or 1" male NPT pipe fitting

Sample Pressure: Up to 400 psia (27.6 bar)

#### Power & Outputs:

Power: 90 to 230 Vac  $\pm 10\%$ , 50 to 400 Hz,  
3 meter power cord provided

Analog Outputs: Two, 4 to 20 mA outputs:

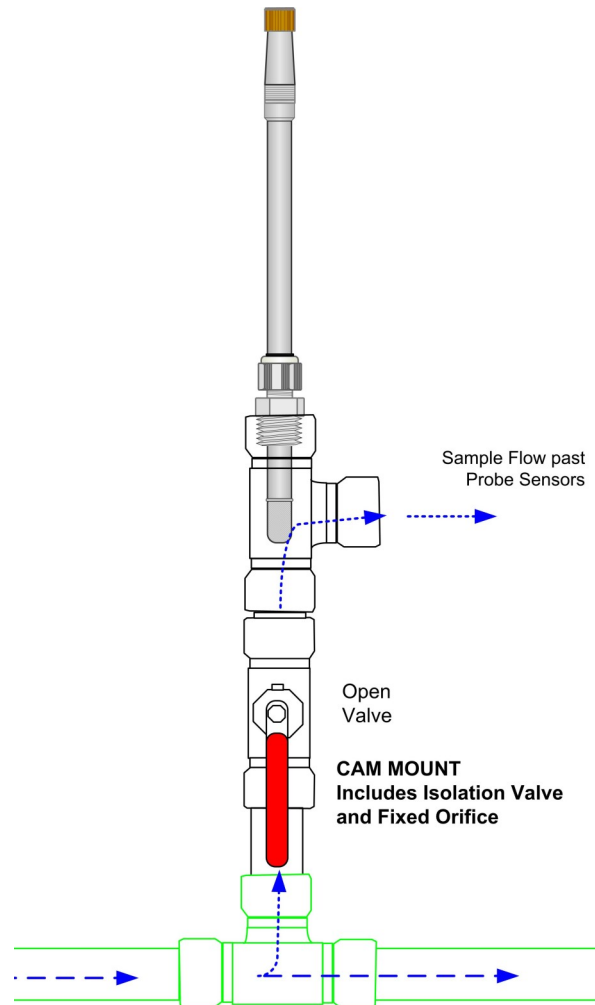
Pressure of compressed air at sensor probe  
in psia

Dew/frost point at 1 atmosphere pressure

Alarm Relay, 1 Form C, 3 A at 250 Vac; Alarm  
mode is low pressure or high dew/frost point

#### Accessories:

CAM: Compressed Air Module sample chamber for probe; provides sample flow to sensor probe, includes a ball valve to isolate the probe from the pressurized air source during service, 3/4 inch NPT female pipe threaded port to compressed air system take-off point



[Click for the Compressed Air Module \(CAM\) Installation Procedure](#)

