

Applications Note 1012 Humidity Measurement

Question: Is there an easy way to measure Humidity?

Answer: There are several. These are the two types our customers request the most.

ThermaViewer ----

Monitor, document, chart and alarm for Humidity and Temperature

Museums, clean rooms, paint booths, operating rooms, hospitals, test chambers all must monitor and

document humidity and temperature conditions. The ThermaViewer hygrometer is a perfect instrument for documenting conditions over time. It stores over 80,000 readings for each of its four channels, and can even display all of that data on its LCD display.

The ThermaViewer is similar to a paperless chart recorder – with a specific purpose. It Monitors and Records Temperature and Humidity. It can be programmed to constantly download the data to your computer or it can be downloaded when needed. Since it can hold such a huge



amount of data it can be downloaded every year and you still will not miss information. When you do download the data to your computer it is saved in an Excel file for easy access. Software is included.

Two Sensor Modules provide up to two inputs for temperature and two for Humidity. In addition the ThermaViewer provides many popular features such as:

- 1. High-low humidity alarm
- 2. High-low temperature alarm
- 3. Alarms on power failure
- 4. Stores 1 year of humidity and temperature history
- 5. Forty-hour back up battery for power failure
- 6. Backlit display.
- 7. Easy to install
- 8. Simple to use
- 9. Displays a 1 year chart on the LCD
- 10. External relay
- 11. Optional phone dialer
- 12. Fulfills all FDA, JCAHO, USDA requirements
- 13. Accurate ±0.3 ℃, ±3.0RH



Approximate Cost: \$ 529 - \$ 779 http://www.advindsys.com/ThermaViewer.htm

4-20 mA and HVAC Sensors ---

Wall and Duct mounted sensors provide an output for Humidity and/or Temperature. 4 - 20 mA outputs provide and easy interface to Data Loggers, PLC's and Alarm Systems. Accuracies of 1% - 5% are available. Temperature may be added to these transmitters for ease of use.

These Relative Humidity Transmitters convert a resistance change to a linear 4 to 20 mA output. The Advanced Ceramic Technology design overcomes the limitations of other resistance-based humidity sensors that utilize water-soluble polymer coatings. The Advanced Ceramic Technology enables these sensors to recover fully from condensation. This also allows the sensor to maintain its accuracy over a longer period of time. Each humidity transmitter is calibrated using a NIST Traceable Temperature and Humidity Chamber.

Types:





Approximate Cost:

RH Accuracy	Room	Duct	Outdoor	Wall Plate	Add Temperature (4 – 20)
5%	\$ 187	\$ 192	\$ 192	\$ 192	+ \$ 100
3%	\$ 270	\$ 280	\$ 290	\$ 290	+ \$ 100
2%	\$ 350	\$ 360	\$ 360	\$ 360	+ \$ 100
1%	\$ 550	\$ 560	\$ 560	\$ 560	Contact A.I.S.

4-20 mA RH Sensors

Basics of RH Applications Note

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