



GREYSTONE

ENERGY SYSTEMS INC

DUCT HUMIDITY /TEMPERATURE TRANSMITTER RH210 Series

The RH210 series uses a highly accurate and reliable Thermoset Polymer based capacitance humidity sensor and Platinum RTD temperature sensor together with state-of-the-art digital linearization and temperature compensated circuitry to monitor humidity levels. The sensors are encapsulated in a 228.60 mm (9") long by 12.7 mm (0.5") diameter S/S probe. A 60 micron HDPE filter protects the sensor for contaminants.

SPECIFICATION:

Humidity Sensor Type.....Thermoset polymer based capacitive
Accuracy±2, 3, or 5% RH, (5% to 95% RH)
Measurement Range.....0 to 100% RH
Temperature Dependence.....±0.05% RH/ °C
Hysteresis±1.5% RH maximum
Repeatability.....±0.5% RH typical
Linearity.....±0.5% RH typical
Stability.....±1% RH typical at 50% RH in 5 yrs.
Sensor Response Time.....15 seconds typical
Sensitivity.....0.1% RH
Temperature Sensor Type.....C - 1000 Ω Platinum. IEC751,
385 Alpha, thin film, ±0.3°C @ 0°C
L - 100 Ω Platinum. IEC751,
385 Alpha, thin film, ±0.3°C @ 0°C
Accuracy±0.1% of span
Operating Temperature-40° to 85°C (-40° to 185°F)
Operating Humidity0 to 95% RH non-condensing
Power Supply.....18 to 35 Vdc, 15 to 26 Vac
Consumption.....22 mA maximum
Input Voltage EffectNegligible over specified operating
range
Protection Circuitry.....Reverse voltage protected and
output limited
Output Signal.....4-20 mA current loop, 0-1, 0-5
or 0-10 Vdc
Output Drive at 24 Vdc.....550 ohms max for current output
10K ohms min for voltage output
Internal AdjustmentsClearly marked ZERO and SPAN pots
Wiring Connections.....Screw terminal block (14 to 22 AWG)
Enclosure.....Standard - ABS - UL94-5VB - IP61
(NEMA 2)
*In order to maintain the published
NEMA/IP ratings, properly rated
conduit or cable gland adapters
must be used.
Probe.....304 series stainless steel
w/ 60 micron HDPE filter



PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
RH210A	Duct Humidity/Temperature Transmitter

CODE	RH Accuracy
02	2%
03	3%
05	5%

CODE	Temperature Sensor
C	1000 Ω Platinum, Class B, ±0.3°C @ 0°C
L	100 Ω Platinum, Class B, ±0.3°C @ 0°C

CODE	Output Signals (RH and Temperature)
2A	4-20 mA
2D	0-5 Vdc
2E	0-10 Vdc

CODE	Scaled Temperature Range
1	0° - 35°C (32° - 95°F)
2	0° - 50°C (32° - 122°F)
*	Custom ranges available

Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

Custom Scaled Temperature Range:

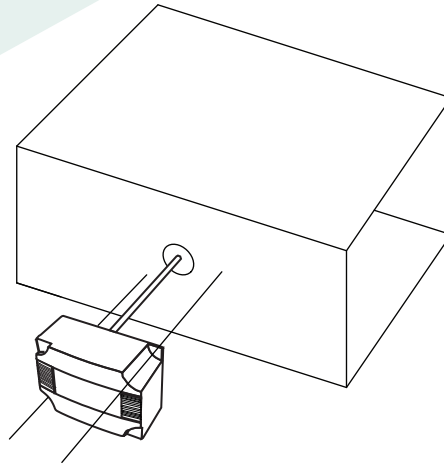
TYPICAL INSTALLATION:

For complete installation and wiring details, please refer to the product installation instructions.

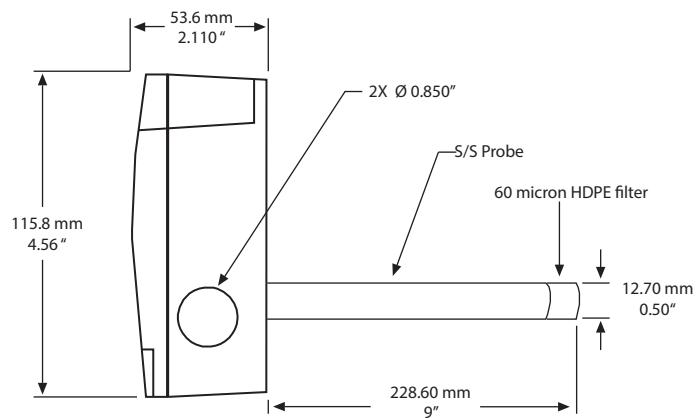
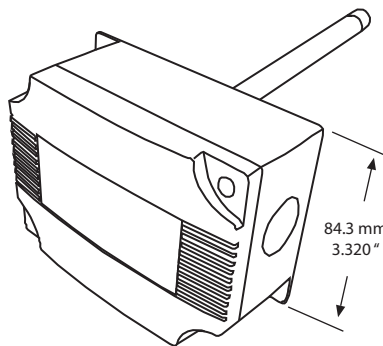
The duct type probes are installed through a hole in the side of the duct to monitor a single point humidity within the duct. Install the probe in a straight section of duct at a suitable distance downstream from any heating, cooling or humidification devices.

Mounting tabs on the outside of the enclosure for ease of installation .

A terminal block connection is provided. for connection to the Building Automation System.



DIMENSIONS:



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RoHS
COMPLIANT



Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC/R sensors and transmitters for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified, assuring our customers of consistent product reliability.

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM