HUMIDITY/TEMPERATURE TRANSMITTER RH Series



Precision humidity/temperature control/sensing

FEATURES:

- Highly stable RH sensor element
- Humidity range: 0-100%
- Accuracy available 2%, 3%, & 5%
- Precision Platinum RTD for Temperature
- AC/DC operation
- Custom logo available



Peace of mind through reliable humidity monitoring

DESCRIPTION:

The RH series of humidity/temperature transmitters are designed for use in environmental monitoring and control systems where high performance and stability are demanded. It's state-of-the-art design combines digital linearization and temperature compensation with a world class capacitive humidity sensor and platinum RTD for reliability and accuracy in even the most critical applications. Various models cover many aspects of RH and temperature measurement and several optional features are available to meet virtually all HVAC applications.

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
Sensor Response Time	15 seconds typical
Stability	±1% RH typical at 50% RH in 5 yrs.
Temperature Sensor Type	1000Ω Platinum, IEC 751, 385 Alpha, thin film
Accuracy	±0.1% of span
Operating Temperature	0° to 70°C (32° to 158°F) for RH110
	-40° to 85°C (-40° to 185°F) for RH210/RH310
Operating Humidity	0 to 95% RH non-condensing
Power Supply	18 to 35 Vdc, 15 to 26 Vac (RH110B is Vdc only)
Consumption	22 mA maximum
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
Output Signals	RH110B: 4-20 mA output only
	RH210A/RH310A: 4-20 mA, 0-5 or 0-10 Vdc
Output Drive at 24 Vdc	550 ohms max for current output
	10K ohms min for voltage output
Internal Adjustments	Clearly marked ZERO and SPAN pots
Wiring Connections	Screw terminal block (14 to 22 AWG)
Enclosures	RH110B (Designer), IP20 (Nema 1), 70x114x30mm, (2.75"w x 4.5"h x 1.25"d)
	RH210A (ABS), IP61 (Nema 2),114x84x53mm (4.5"w x 3.3"h x 2.1"d)
	RH310A (ABS WP) IP65 (Nema 4X),145x100x64mm (5.7"w x 3.95"h x 2.5"d)
DUDAG D. I	
KH210 Probe	230 mm (9") probe length x 12.7 mm (1/2") diameter
	stainless steel with porous filter





RELATIVE HUMIDITY: PRODUCT ORDERING INFORMATION

MODEL	Product Description, Dual transmitter - Humidity and Temperature					
RH110B RH210A RH310A	Designer Space					
	02C 03C 05C	Accuracy 2% 3% 5%	1			
	CODE Power Supply 1 24 Vdc (RH110B) 2 24 Vac/Vdc (RH210A & RH310A)					
			CODE A D E	Output Signals (RH and Temperature) I - 20 mA O - 5 Vdc (RH210A and RH310A only) O - 10 Vdc (RH210A and RH310A only)		
				CODE Transmitter Span Range 1 0°C - 35°C (32°F - 95°F) 2 0°C - 50°C (32°F - 122°F) 3 0°C - 100°C (32°F - 212°F) 6 -50°C - 50°C (-58°F - 122°F)		
RH110B	03C	1	A	1		

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

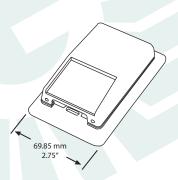
EXAMPLE:

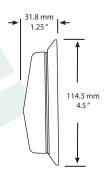
RH110B03C2A1

3% Space designer humidity c/w temperature transmitter with 1000Ω RTD, 24 Vdc power supply, 4 - 20mA output over 0°C - 35°C (32°F - 95°F).

Note: Remote display option also available, see Miscellaneous Control Devices data sheet.

RH110B

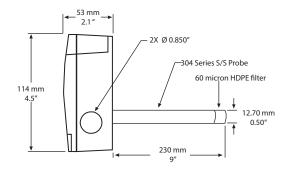




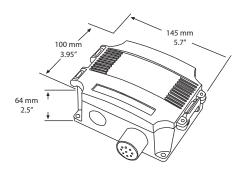


RH210A





RH310A





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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 leadingedge 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.