



GREYSTONE ENERGY SYSTEMS INC

S/S SURFACE HUMIDITY TRANSMITTER RH100S Series

The RH100S Stainless Steel Wall Plate Relative Humidity transmitter uses a field-proven capacitive type humidity sensor and microprocessor temperature compensation for reliable, accurate measurement of indoor humidity.

The wall plate sensor is perfect for locations requiring periodic wipe down as it features a 304 stainless steel plate with a neoprene gasket. The sensor is protected by a 100 micron sintered stainless steel filter.

This product is available as a humidity sensor only or with various direct temperature sensors.

The plate sensor is available with either 4-20 mA or 0-5 Vdc or 0-10 Vdc output signal types and the transmitter is located on the back of the plate for ease of installation.



SPECIFICATION: RH100S

Sensor TypeThermoset Polymer based capacitive
 Accuracy±3 or 5% RH, (5% to 95% RH)
 Measurement Range.....0 to 100% RH
 Hysteresis±3% RH maximum
 Response Time..... 15 seconds typical
 Stability±1.2% RH typical
 Operating Temp.....0° to 70°C (32° to 158°F)
 Operating Humidity0 to 95% RH non-condensing
 Sensor Protection..... 100 micron sintered filter
 Power Supply..... 18 to 35 Vdc, 20 to 26 Vac
 Consumption22 mA maximum
 Input Voltage EffectNegligible over specified operating range
 Protection Circuitry.....Reverse voltage protected and output limited
 Output Signal.....4-20 mA current loop, 0-5 or 0-10 Vdc
 Output Drive at 24 dc ...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)
 Opt.Temp. Sensor.....Various RTDs and thermistors available as two-wire resistance output (See Ordering Chart)
 EnclosureS/S, IP50 (Nema 1), 70.6x114.3x41mm (2.8" w x 4.5" h x 1.6" d)

PART NUMBER SELECTED

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
RH100S	S/S Surface Humidity Transmitter

CODE	Accuracy
03	3%
05	5%

CODE	Output
I20	4-20mA output
V05	0-5Vdc output
V10	0-10Vdc output

CODE	Optional Temperature Sensor
L	100Ω Platinum, IEC 751, 385 Alpha, thin film
C	1000Ω Platinum, IEC 751, 385 Alpha, thin film
F	1801Ω, NTC Thermistor, ±0.2°C
E	3,000Ω, NTC Thermistor, ±0.2°C
D	10,000Ω, type 3, NTC Thermistor, ±0.2°C
J	10,000Ω, type 2, NTC Thermistor, ±0.2°C
K	20,000Ω, NTC Thermistor, ±0.2°C
M	1000 Ω Nickel, Class B, DIN 43760
B	10k Ω Type 3, NTC Therm, ±0.2 C c/w 11K shunt Resistor
G	2.252KΩ Thermistor, ±0.2 C

CODE	Options
TP	Tamperproof Screws

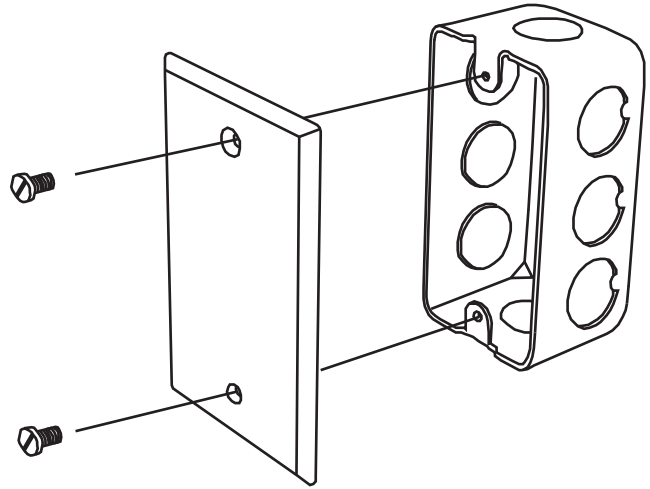
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

TYPICAL INSTALLATION:

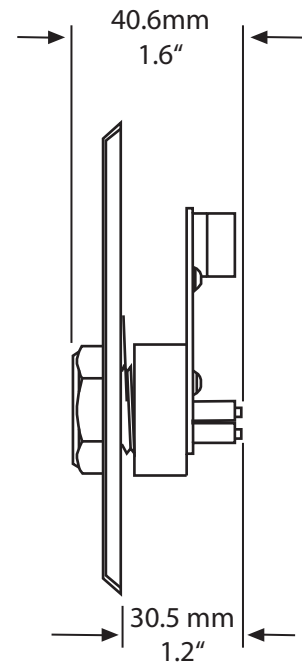
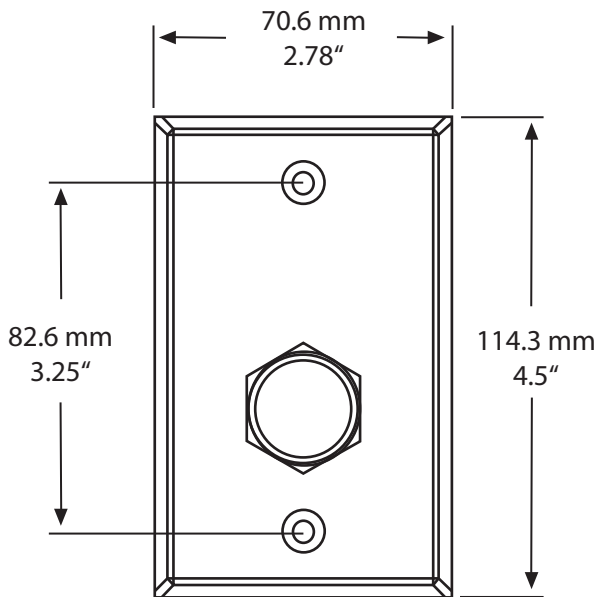
For complete installation and wiring details, please refer to the product installation instructions.

The SS plate type sensor installs directly on a standard electrical box and should be mounted five feet from the floor of the area to be controlled. Do not mount the sensor near doors, opening windows, supply air diffusers or other known air disturbances. Avoid areas where the sensor is exposed to vibrations or rapid temperature changes.

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



ENCLOSURE DIMENSIONS



GREYSTONE

ENERGY SYSTEMS INC

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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