

PRODUCT DESCRIPTION

The RH100S Stainless Steel Wall Plate Relative Humidity transmitter uses a fieldproven 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.

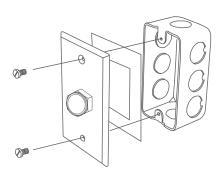
TYPICAL INSTALLATION

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

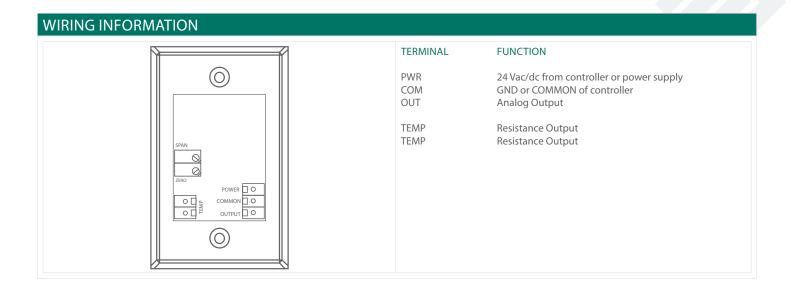
The SS plate type sensor installs directly on a standard electrical box and should be mounted five feet from the floor of the area to be controlled. Do not mount the sensor near doors, opening windows, supply air diffusers or other known air disturbances. Avoid areas where the sensor is exposed to vibrations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

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

| SPECIFICATIONS | |
|-----------------------------|---|
| SENSOR TYPE | Thermoset polymer based capacitive |
| SENSOR PROTECTION | 100 micron sintered filter |
| OPTIONAL TEMPERATURE SENSOR | Various RTD's and thermistors available as 2-wire resistance outputs |
| ACCURACY | ±2, 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 %RH typical at 50 %RH in 5 years |
| OPERATING TEMPERATURE | 0 to 50°C (32 to 122°F) |
| OPERATING HUMIDITY | 0 to 95 %RH non-condensing |
| POWER SUPPLY | 18 to 35 Vdc, 20 to 26 Vac |
| CONSUMPTION | 22 mA maximum |
| INPUT VOLTAGE EFFECT | Negligible over specified operating range |
| PROTECTION CIRCUITRY | Reverse voltage protected and output limited |
| OUTPUT SIGNAL | 4-20 mA current loop, 0-5 Vdc, 0-10 Vdc, or 0-1 Vdc (jumper selectable) |
| OUTPUT DRIVE @ 24 VDC | Current: 550Ω max Voltage: $10,000\Omega$ min |
| INTERNAL ADJUSTMENTS | Clearly marked ZERO and SPAN pots |
| ENCLOSURE | Stainless steel, IP50 (NEMA 1) |
| DIMENSIONS | 70mm W x 114mm H x 41mm D (2.75" x 4.5" x 1.6") |
| TERMINATION | Screw terminal block (14 to 22 AWG) |
| COUNTRY OF ORIGIN | Canada |







| PRODUCT | RH100S | S/S Surface Humidity Transmitter |
|-----------------------------|---|---|
| ACCURACY | 02 03 05 | 2% 3% 5% |
| ОИТРИТ | I20 V05 V10 | 4-20 mA output 0-5 Vdc output 0-10 Vdc output |
| OPTIONAL TEMPERATURE SENSOR | L C F E D J K M B | 100Ω Platinum, IEC 751, 385 Alpha, thin film 1000Ω Platinum, IEC 751, 385 Alpha, thin film 1801Ω NTC Thermistor, $\pm 0.2^{\circ}$ C 3,000Ω NTC Thermistor, $\pm 0.2^{\circ}$ C 10,000Ω Type 3, NTC Thermistor, $\pm 0.2^{\circ}$ C 10,000Ω Type 2, NTC Thermistor, $\pm 0.2^{\circ}$ C 20,000Ω NTC Thermistor, $\pm 0.2^{\circ}$ C 20,000Ω NTC Thermistor, $\pm 0.2^{\circ}$ C 1000Ω Nickel, Class B, DIN 43760 10,000Ω Type 3, NTC Thermistor, $\pm 0.2^{\circ}$ C c/w 11K shunt resistor 2.252KΩ Thermistor, 0.2°C |
| OPTIONS | TP | Tamperproof screws |

| PART | NUMBER |
|--------|--------|
| RH100S | |
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 $NOTE: Greystone\ Energy\ Systems, Inc.\ reserves\ the\ right\ to\ make\ design\ modifications\ without\ prior\ notice.$

