

INSTALLATION INSTRUCTIONS

HTOR Economy Series Room RH Transmitters



IMPORTANT WARNINGS

- Only qualified trade installers should install this product
- This product is not intended for life-safety applications
- Do not install in hazardous or classified locations
- The installer is responsible for all applicable codes
- De-energize power supply prior to installation or service

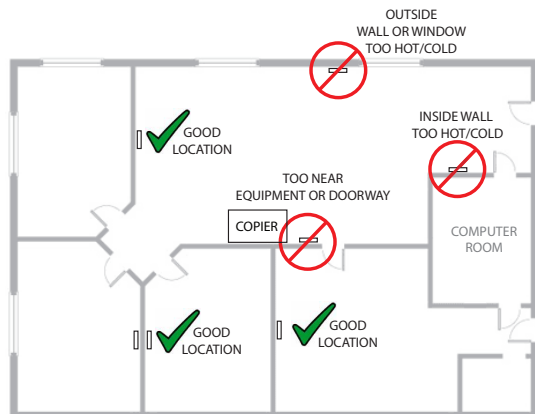
PRODUCT APPLICATION LIMITATION:

Senva products are not designed for life or safety applications. Senva products are not intended for use in critical applications such as nuclear facilities, human implantable device or life support. Senva is not liable, in whole or in part, for any claims or damages arising from such uses.

INSTALLATION

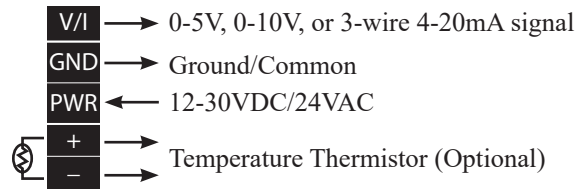
1. IMPORTANT! Locate sensor in an area away from ventilation sources and heat generating equipment and appliances. Sensor should be mounted at light switch height in a vertical orientation.

NOTE: Do not install sensor in multi-gang electrical boxes with line voltage or other electrical devices.

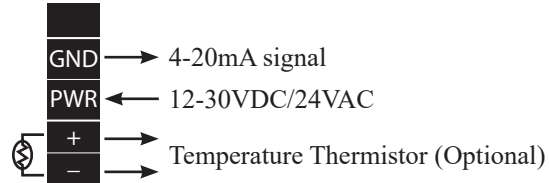


2. Wire sensor as shown.

3-wire:



2-wire:



3. If installing in a junction box, check that provided insulation covers entire junction box opening to ensure reading accuracy.

4. Snap on screw covers to complete installation.

CALIBRATION

Senva RH sensors are factory calibrated to NIST traceable standards. No field calibration is necessary or recommended.

TROUBLESHOOTING

Symptom	Solution
No output	Check wiring. Ensure power supply meets requirements.
Temp or RH reading error	Verify control panel software is configured for correct output scaling.
	Verify accuracy of test instrument. Observe installation and calibration guidelines
	Verify unit is located away from sources of hot/cold.
	Verify RH / T sensing element is inserted properly
	Install insulation foam gasket provided to prevent thermal conduction from inside wall.
	Perform calibration only if necessary.

SPECIFICATIONS

Power supply		12-30VDC/24VAC ⁽¹⁾ 24mA max power consumption
Outputs	RH	2-wire 4-20mA, 3-wire 4-20mA, 0-5V, 0-10V ⁽⁴⁾ (Optional)
Output scaling	RH	0-100%RH
Thermistor/RTD options		Yes, see ordering table in catalog
Media filter		PTFE membrane, IP54 protection
Relative Humidity	Accuracy	2% models: $\pm 2\%$ max 0 to 100% RH
		3% models: $\pm 3\%$ max 0 to 100% RH
	Resolution	0.01%RH
	Hysteresis	$\pm 0.8\%$ RH
	Repeatability	0.08% RH
	Non-linearity	Factory linearized $< 1\%$ RH
	Temperature coefficient	Fully compensated by on-board sensor
	Response time ⁽²⁾	8s
	Output update rate	0.5s
	Operating range	0 to 100%RH (non-condensing)
	Long term drift	$< 0.25\%$ RH per year
	Element Recommended Operating conditions ⁽³⁾	41 to 140°F (5 to 60°C) @ 20% to 80% RH
Environmental	Enclosure Rating	IP20/NEMA 1
	Unit Temp Rating	-40°F to 158°F (-40 to 70°C)

(1) One side of transformer secondary is connected to signal common. Dedicated transformer is recommended.

(2) Time for reaching 63% of reading at 25°C and 1 m/s airflow.

(3) Long term exposures to conditions outside normal range or high humidity may temporarily offset the RH reading (+3%RH after 60 hours.)

(4) 15-30VDC/24VAC power supply voltage required for 10 Volt output. Power consumption 100mA max AC, 50mA max DC