

Wireless Outside Air Humidity/Temperature

- 2.4 GHz ZigBee™ wireless for easy installation
- 2% or 3% accuracy (NIST certification options)
- LCD display with field calibration
- Field replaceable element



DESCRIPTION

The WO outside air series consists of a labor saving solar powered wireless temp/humidity transmitter with a remote receiver. This eliminates costly conduit, roof penetrations, and allows for easy repositioning should conditions warrant. Excellent stability with reliable operation.

APPLICATIONS

- Outdoor humidity and temperature measurement for building control
- Eliminate costly conduit runs and relocation

FEATURES

Breakthrough wireless labor savings

- 2.4 GHz ZigBee™ wireless for super fast installation—save hours on conduit and allows for flexible repositioning.
- Solar-powered for long, reliable transmission; works even in cloudy areas

Versatile

- 2% or 3% RH versions with field replaceable sensor
- 3-wire 0-10V output

Easy to maintain

- Field replaceable sensor—without disturbing installation

Superior RH sensing

- On-board temperature compensation for RH. Eliminates temperature coefficient errors and achieves an excellent measurement accuracy as well as high repeatability and offset stability.
- State of the art testing facilities. 8-point calibration certificate available (NIST traceability—consult factory)

Quality

- Industry leading 7-year warranty/ 2-year replaceable element warranty



Solar powered with integral battery

- Trouble-free operation without changing batteries or pulling conduit



Field replaceable element

- Ideal for harsh environments
- Accurate dual RH/Temp IC sensing



7 year limited warranty

ORDERING

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 WO -
 Accuracy

2 = 2%
 3 = 3%

Replacement Sensor Elements

H50-2 = 2% accuracy
 H50-3 = 3% accuracy



Consult factory for certification and point calibration options
 (Write your selected Accuracy and Replacement Sensor Element numbers/ letters in the boxes above)

SPECIFICATIONS

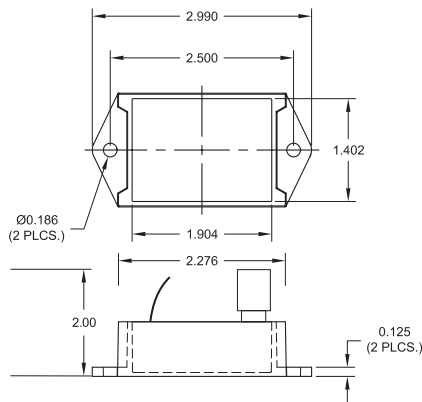
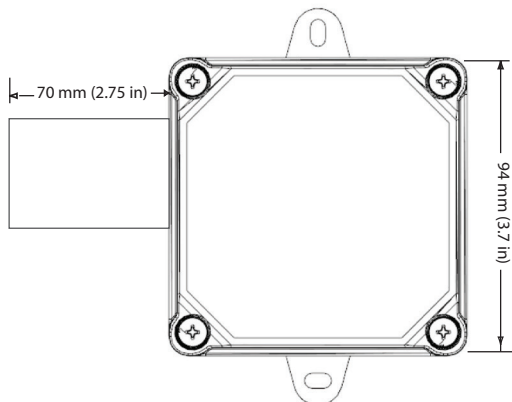
Power Supply	Transmitter	Long life battery with integral solar charger	
	Receiver	12-30VDC/12VAC, 45mA max	
Radio	Frequency/Power	2.4GHz unlicensed ISM band, ZigBee™, 60mW	
	Range	300' line-of-sight	
	FCC id	OUR24XBEE	
	Broadcast interval	Daylight, 5-min; Dark, 30-min	
Outputs	RH% and Temperature	3-wire 0-10VDC	
Output scaling	RH%	0-100% RH	
	Temperature	-40 to 140° F	
Media filter	Sintered Stainless Steel Screen		
Relative Humidity	Accuracy	2% models, +/-2% over 10 to 90%RH range 3% models, +/-3% over 20 to 80%RH range	
	Resolution	0.05%RH	
	Hysteresis	+/-1%RH	
	Non-Linearity	factory linearized <1%RH	
	Temperature coefficient	fully compensated by on-board temp sensor	
	Response time (2)	30s	
	Output update rate	2s	
	Operating range	0 to 100%RH (non-condensing)	
	Long term drift	<0.5%RH per year	
	Operating conditions (3)	-20° C to 60° C @ RH>90% -20° C to 80° C @ RH=50%	
	Accuracy (-20° C to 70° C range)	2% models, <+/-1° C; 0.5° C typ @ 25° C 3% models, <+/-2° C; 0.5° C typ @ 25° C	
	Temperature	Resolution	0.01° C
		Repeatability	+/-0.1° C
Response time (2)		30s	
Output update rate		2s	
Operating range		-40° C to 120° C	

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

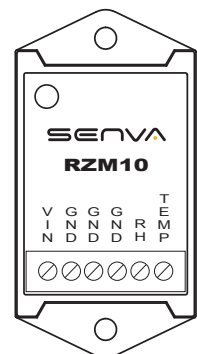
(2) Time for reaching 63% of reading at 25° C and 1 m/s airflow

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

DIMENSIONS



TYPICAL WIRING



VIN = Power supply excitation voltage
 GND = Ground/Common
 RH = RH Voltage output, 0-10vdc
 TEMP = Temperature output, 0-10vdc