Senergy Sensors & Controls



Product Data

SAP-H300 Series SAP-H200 Series SAP-H100 Series

Relative Humidity









Senergy Sensors & Controls 800-893-4846 (Phone) 800-797-0806 (Fax) www.senergycontrols.com

Superior Accuracy & Performance (SAP®)

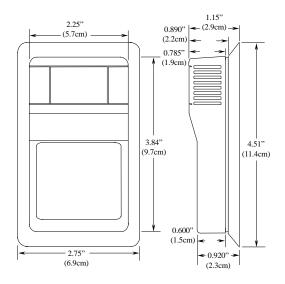
Senergy manufactures SAP sensors for superior accuracy and performance. At the heart of every Senergy Relative Humidity sensor is a precision resistive sensing element. A resistive element is utilized because of the sensor's long term stability and it's broad operational range (20 to 95% RH). Our resistive sensing technology delivers exceptional performance at high humidities and is resistant to surface contaminants. If Relative Humidity is less than 20%, Senergy's SAP humidity sensors will not perform at optimum conditions. For very low RH environments, a capacitive sensing technology would be better suited, noting there will be sacrifices of accuracy on the high end, frequent calibration and sensitivity to contaminants will be inherent. Senergy has opted to forego this low end RH accuracy for all of the benefits listed above. The transmitter circuit design of Senergy's Relative Humidity sensors utilizing a precision resistive sensing element was tested by NBCIP "National Building Controls Information Program". Six major manufacturers of Humidity Sensors were tested for Accuracy, Repeatability, Linearity, & Hysteresis. Senergy's Humidity design was selected based on the outcome of these test results. (Test results available upon request)

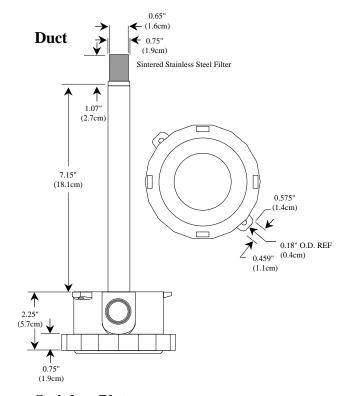
Senergy Sensors and Controls is concerned with saving energy in your facility, as well as preserving our planet. Senergy has "stepped up" and outside the box in manufacturing in an effort to reduce the carbon footprint each and every sensor leaves on the planet. The true cost of a sensor must include; initial acquisition cost, long term energy waste due to inaccuracies, as well as the fuel & emissions from packaging & transportation getting the sensors from production to their final destination. Senergy is setting new standards in accuracy and utilizing new, lighter weight materials in the production of its sensors in an effort to minimize fuel and emissions from transportation to the installation site. Senergy's packaging is sensitive to the environment including recycled boxes and biodegradeable packing material.

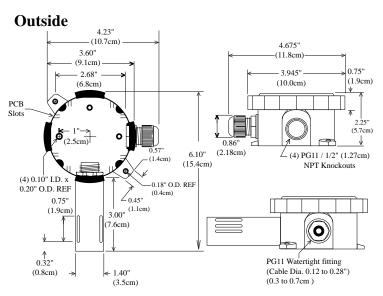
Product Specifications

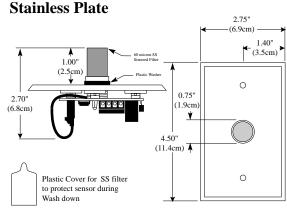
Supply Voltage	250 Ohm Load: +15 to 36 VDC / 24 VAC
	500 Ohm Load: +18 to 36 VDC / 24 VAC
Output	2-wire, 4 to 20mA
	3-wire, 0-5, 0-10 VDC or 4 to 20mA
Accuracy @ 77°F	+/- 1% over 20% span (between 20 to 95%)
	+/- 2%, or 3% from 20 to 95%
Hysteresis	Less than 0.4% RH
Long Term Stabiltiy	Less than 2% drift / 5 years
Repeatablity	0.5% RH
Operating Temperature Range	-10 to 122°F (-23.3 to 50°C)
Operating Humidity Range	0 to 100 % RH
Response Time	110 seconds for 63% Step
Sensitivity	0.1 % RH
Interchangeability	< +/- 3% RH nominal

Dimensions Room









Ordering Information

