SUN SHIELD
Weather Proof Protector

The ACI Sun Shield is a reliable solution for protecting relative humidity sensors when mounted in a location where an overhang or shade is unavailable. It consists of nine (9) molded, white plastic plates which are used to reduce the thermal effect of the sun and increasing the air flow between the plates. The Sun Shield also provides an added level of protection for the sensors from rain and snow. The Sun Shield is available with our +/-2% RH transmitter and has field selectable outputs of 4-20mA, 0-5VDC and 0-10VDC.

Applications: Outdoor Humidity

The ACI RH Sun Shield is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.
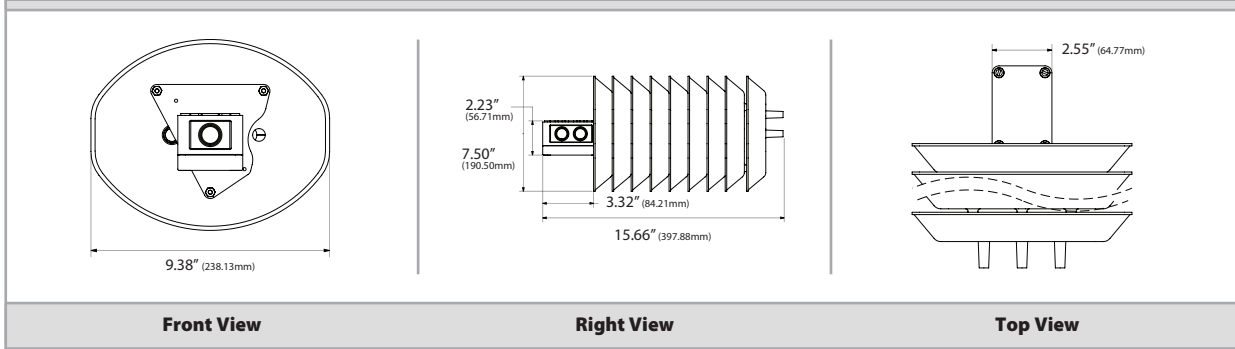
PRODUCT SPECIFICATIONS

RH Supply Voltage	**4-20 mA:** 250 Ohm Load: 15 - 40 VDC / 18 - 28 VAC │ **500 Ohm Load:** 18 - 40 VDC / 18 - 28 VAC
(Reverse Polarity Protected):	**0-5 VDC:** 12 - 40 VDC / 18 - 28 VAC │ **0-10 VDC:** 18 - 40 VDC / 18 - 28 VAC
RH Supply Current (VA):	**Voltage Output:** 8 mA maximum (0.32 VA) │ **Current Output:** 24 mA maximum (0.83 VA)
RH Output Load Resistance:	**4-20 mA:** 700 Ohms maximum │ **0-5 VDC or 0-10 VDC:** 4K Ohms Minimum
RH Output Signal:	**2-wire:** 4 - 20 mA (Factory Default) │ **3-wire:** 0-5 or 0-10 VDC and 4 - 20 mA (Field Selectable)
RH Accuracy @ 77°F (25°C):	+/- 1% over 20% RH Range between 20 to 90% │ +/- 2%, 3%, or 5% from 10 to 95%
RH Measurement Range:	0-100%
Operating RH Range:	0 to 95% RH, non-condensing (Conformally Coated PCB's)
Operating Temperature Range:	-40 to 140°F (-40 to 60°C)
Storage Temperature Range:	-40 to 149°F (-40 to 65°C)
**RH Stability	Repeatability	Sensitivity:**	Less than 2% drift / 5 years │ 0.5% RH │ 0.1% RH
RH Response Time (T63):	20 Seconds Typical
RH Sensor Type:	Capacitive with Hydrophobic Filter
RH Transmitter Stabilization Time:	30 Minutes (Recommended time before doing accuracy verification)
RH Connections:	Screw Terminal Blocks (Polarity Sensitive)
Wire Size:	16 (1.31 mm^2) to 26 AWG (0.129 mm^2)
RH Terminal Block Torque Rating:	4.43 to 5.31 lb-in (0.5 to 0.6 Nm)
RH NIST Test Points:	**Default Test Points:** 3 Points (20%, 50% & 80%) or 5 Points (20%, 35%, 50%, 65% & 80%)
	1% NIST Test Points: 5 Points within selected 20% Range (ie. 30%-50% are 30, 35, 40, 45 & 50)
Enclosure Specifications (Material, Flammability, Temperature, NEMA/IP Rating):	**"-4X" Enclosure:** Polystyrene Plastic; UL94-V2; -40 to 158°F (-40 to 70°C); NEMA 4X (IP 66)
Sensing Tube Dimensions (Length x Diameter):	6.83" (173.48 mm) x 0.740" (18.80mm)
Product Dimensions (L x W x D):	15.66" (397.88 mm) x 9.38" (238.13 mm) x 7.50" (190.50 mm)
Product Weight:	5.49 lbs. (2.49 kg)
Agency Approvals:	CE, RoHS2, WEEE

RoHS COMPLIANT 2002/95/EC

Automation Components, Inc.

DIMENSIONAL DRAWING

2.23" (56.71mm)

7.50" (190.50mm)

3.32" (84.21mm)

15.66" (397.88mm)

2.55" (64.77mm)

9.38" (238.13mm)

| Front View | Right View | Top View |

CUSTOM ORDERING

Model # Example: A/ - RH2 - O-SUN - 010
A.   B.   C.   D.

		MODEL #
A. Sensor Series *No Selection Required*	**A/**	**A/**
B. Model Series *No Selection Required*	**RH2** = +/-2%	**RH2**
C. Configuration *No Selection Required*	**O-SUN** = Outside Sun Shield (NEMA 4X)	**O-SUN**
D. Output Signal *Select One (1)*	**----** = 4 to 20 mA (Default) | **010** = 0 to 10 VDC | **05** = 0 to 5 VDC	

Note: Outputs are field selectable between 4-20 mA, 0-5 VDC & 0-10 VDC

ACCESSORIES ORDERING [NIST]

Model # Example: NIST RH CERT

Model #	Description
NIST RH CERT	RH Calibration Certificate (Specify 3 Point or 5 Point NIST)

Note: When ordering NIST certificates, please add an additional line item under the corresponding A/RHx-O-SUN Model Number