



FLEXIBLE AVERAGING

Multipoint Averaging Sensor, Platinum RTD

The ACI Platinum Flexible Averaging Series features an 18 AWG Plenum rated cable with Etched Teflon colored lead wires to differentiate the different sensor types. ACI recommends using 18 AWG lead wires to reduce external lead wire resistance when using a Platinum RTD. All sensors are manufactured with 4 or 9 sensing points determined by the length of the sensor. Averaging sensors provide a better average temperature of the air inside larger ducts when compared to that of a single point sensor. The flexible averaging sensors are limited to applications where operating temperatures are limited and where high humidity, chemical resistance and UV Light Air Treatment Systems aren't required. Each of the sensing elements is protected by a dual wall adhesive lined heat shrink tubing to provide a level of moisture

protection to the sensing elements. The sensor length should be determined by the dimensional size of your duct. Standard enclosure options include a "-GD" Galvanized or "-PB" plastic duct enclosure with hinged cover. Each unit includes nylon wire ties and mounts for mounting. Optional copper capillary or universal plastic mounting clips, NEMA/IP rated enclosures and NIST Certificates are available as referenced in the ordering grid.

Applications: Air Handlers, Roof Top Units, Mixed/Discharge or Supply/Return Air Monitoring, Data Centers, Hospitals

PRODUCT SPECIFICATIONS

Sensor Type Sensor Curve:	Platinum RTD PTC (Positive Temperature Coefficient)
Number Sensing Points:	8' and 12' Models: Four 24' & 50' Models: Nine
Number Wires:	A/1K-2W-FA Series: Two (Non-Polarity Sensitive)
Sensor Output @ 0°C (32°F):	1000 Ohms nominal
Sensor Tolerance:	+/- 0.06% Class A
Din Standard Temperature Coefficient:	DIN EN 60751 (IEC 751) 3850 ppm / °C
Sensor Accuracy @ 20°C (68°F):	8' = +/- 0.34°C (+/- 0.62°F) 12' = +/- 0.45°C (+/- 0.81°F) 24' = +/- 0.80°C (+/- 1.44°F) 50' = +/- 0.90°C (+/- 1.62°F)
Sensor Stability:	+/- 0.03% after 1000 Hours @ 300°C (572°F)
Response Time (63% Step Change):	15 Seconds nominal
Self-Heating Maximum Operating Current:	4 mW/°C (Still Air) 3 mA
Operating Storage Temperature Range:	0 to 75°C (32 to 167°F) -20 to 75°C (-4 to 167°F)
Operating Humidity Range:	10 to 90% RH, non-condensing
Enclosure Specifications (Material, Flammability, NEMA/IP Ratings):	"-GD" Enclosure: Galvanized Steel; NEMA 1 (IP10); "-PB" Enclosure: ABS Plastic, UL94-HB; Plenum Rated "-BB" Enclosure: Aluminum; NEMA 3R (IP 14) "-4X" Enclosure: Polystyrene Plastic; UL94-V2; NEMA 4X (IP 66)
Sensor Jacket Material Cable Ratings:	Low Smoke PVC CL2P or CMP Plenum Rated Cable
Sensor Cable Diameter:	0.170" (4.32mm) nominal
Lead Length Conductor Size:	12" (30.5cm) 22 AWG (0.65mm)
Lead Wire Insulation Wire Rating:	Etched Teflon (PTFE) Colored Leads MIL-W-16878/4 (Type E)
Lead Wire Conductor Material:	Silver Plated Copper
Product Dimensions Product Weight:	See table on back of Product Data sheet
Agency Approvals:	RoHS2, WEEE





DIMENSIONAL DRAWING

<p>Plastic Box Enclosure [PB]</p>		
<p>Galvanized Enclosure [GD]</p>		
<p>Bell Box Enclosure [BB]</p>		
<p>NEMA 4X Enclosure [4X]</p>		
Front View	Right View	Top View

CUSTOM ORDERING		Model # Example: A/ 1K 2W FA 8' GD NIST	MODEL #
A. Sensor Series <i>No Selection Required</i>	B. Model Series <i>No Selection Required</i>	C. Number of Wires <i>No Selection Required</i>	D. Configuration <i>No Selection Required</i>
A/	1K = 1K Ohm Platinum RTD	2W = Two Wires	FA = Flexible Plenum Rated Cable Averaging Sensor
E. Sensor Length <i>Select One (1)</i>	8' = 8' (2.44m) 12' = 12' (3.66m) 24' = 24' (7.31m) 50' = 50' (15.24m)		GD = Galvanized PB = Plastic BB = Aluminum, NEMA 3R 4X = NEMA 4X
F. Enclosure <i>Select One (1)</i>	---- = No NIST Certificate NIST = NIST Certificate (Must Specify 1, 3 or 5 Points)		
G. NIST <i>Select One (1)</i>			

ACCESSORIES ORDERING		Model # Example: A/CAPILLARY CLIP QTY: 1 -OR- 130525
Model #	Item #	Description
A/CAPILLARY CLIP QTY: 1	130525	Capillary Mounting Clip, Copper, Quantity: 1
A/CAPILLARY CLIP QTY: 50/BAG	142410	Capillary Mounting Clip, Copper, Quantity: 50/Bag
UNIVERSAL CLIP	128248	Universal Mounting Clip, Plastic, Quantity: 50/Bag

