

FLEXIBLE AVERAGING

Multipoint Averaging Sensor, Thermistor

The ACI Thermistor Flexible Averaging Series features an 18 AWG Plenum Rated cable sensing element with two, 12 inch 22 AWG Etched Teflon colored lead wires to differentiate the different sensor types. The sensors in this series are multi-point. Averaging sensors provide a better overall average temperature of the actual air inside larger ducts when compared to that of a single point sensor. All flexible averaging sensors are limited to being used in applications where operating temperatures are limited and high humidity, chemical resistance, and UV light sources aren't required. Each of the sensing elements is protected using a dual wall adhesive lined heat shrink tubing to provide a basic level of moisture protection. The sensor length should be determined by the size of your duct. Standard enclosure options include a galvanized junction box "-GD" or plastic duct enclosure with hinged cover "-PB". Each unit includes nylon wire ties and mounts for mounting. Optional copper capillary or universal plastic mounting clips, NEMA/IP Weather proof enclosures and NIST Certificates are available as referenced in the ordering grid on the back of the product data sheet.

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

The ACI Thermistor Flexible Averaging Series 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.

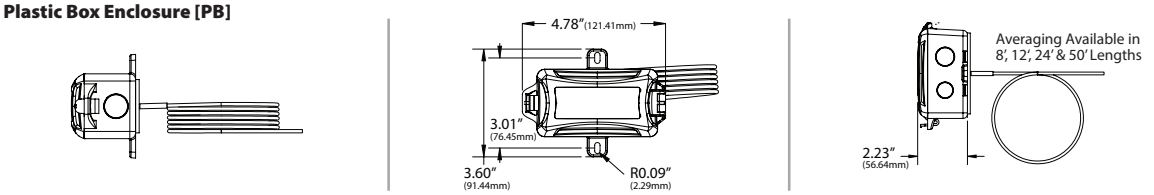
PRODUCT SPECIFICATIONS

Sensor Type | Sensor Curve:	Thermistor | Non-Linear, NTC (Negative Temperature Coefficient)	
Number Sensing Points | Number Wires:	**8' and 12' Lengths:** Four | **24' and 50' Lengths:** Nine | Two (Non-Polarity Sensitive)	
Sensor Output @ 25°C (77°F)	**A/1.8K:** 1.8KΩ nominal | (Red/Yellow)	**A/10KS:** 10KΩ nominal | (White/Blue)
(Lead Wire Colors):	**A/3K:** 3KΩ nominal | (White/Brown)	**A/10K-E1:** 10KΩ nominal | (Gray/Orange)
	A/AN (Type III): 10KΩ nominal | (White/White)	**A/20K:** 20KΩ nominal | (Brown/Blue)
	A/AN-BC: 5.238KΩ nominal | (White/Yellow)	**A/50K:** 50KΩ nominal | (Brown/Yellow)
	A/CP (Type II): 10KΩ nominal | (White/Green)	**A/100KS:** 100KΩ nominal | (Black/Yellow)
	A/CSI: 10KΩ nominal | (Green/Yellow)	
Accuracy 0-70°C (32-158°F):	**8' & 12' Lengths:** +/-0.20°C (+/-0.36°F); **A/1.8K:** +/-1.00°C (+/-1.80°F); **A/10KS:** +/-0.60°C (+/-1.10°F)	
	24' & 50' Lengths: +/-0.20°C (+/-0.36°F); **A/1.8K:** +/-1.00°C (+/-1.80°F); **A/10KS:** +/-0.60°C (+/-1.10°F)	
Power Dissipation Constant:	**8' & 12' Lengths:** 6 mW/°C except **A/AN**, **A/CP**, **A/10KE1**: 4 mW | **A/1.8K:** 2 mW	
	24' & 50' Lengths: 9 mW/°C except **A/AN**, **A/CP**, **A/10KE1:** 6 mW | **A/1.8K:** 3 mW	
Stability:	Sensor Dependent; Contact ACI for more information on specific sensor	
Response Time (63% Step Change):	15 Seconds nominal	
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 Type,	**"-GD" Enclosure:** Galvanized Steel, NEMA 1 (IP10);	
Flammability, NEMA/IP Ratings):	**"-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 | 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	

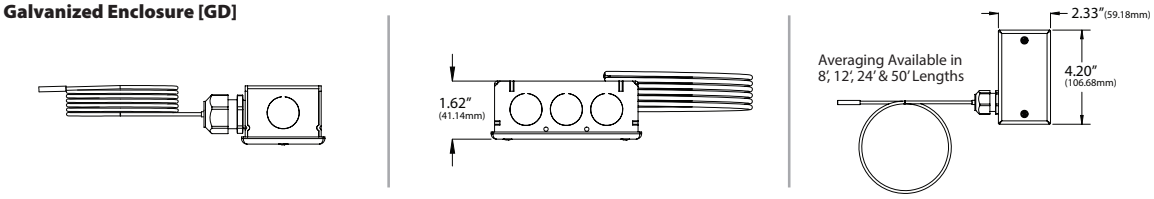
1.888.610.7664 www.calcert.com sales@calcert.com

DIMENSIONAL DRAWING

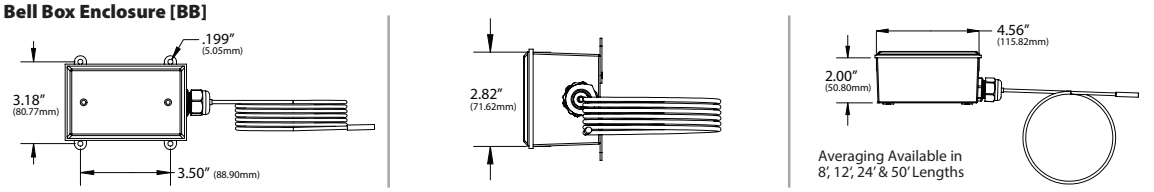
Plastic Box Enclosure [PB]



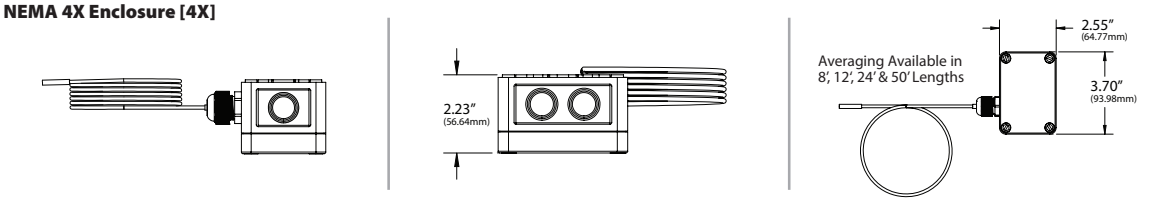
Galvanized Enclosure [GD]



Bell Box Enclosure [BB]



NEMA 4X Enclosure [4X]



Front View | **Right View** | **Top View**

CUSTOM ORDERING

Model # Example: A/ (A.) | 1.8K (B.) | FA (C.) | 24' (D.) | GD (E.) | NIST (F.)

		MODEL #
A. Sensor Series *No Selection Required*	**A/** →	**A/**
B. Model Series *Select One (1)*	**1.8K** | **3K** | **AN** | **AN-BC** | **CP** | **CSI** | **10KS** | **10K-E1** | **20K** | **50K** | **100KS**	
C. Configuration *No Selection Required*	**FA** = Flexible Plenum Rated Cable Averaging Sensor →	**FA**
D. Probe Length *Select One (1)*	**8'** = 8' Sensor | **12'**= 12' Sensor | **24'** = 24' Sensor | **50'** = 50' Sensor	
E. Enclosure *Select One (1)*	**GD** = Galvanized | **PB** = Plastic | **BB** = Aluminum, NEMA 3R | **4X** = NEMA 4X	
F. NIST *Select One (1)*	**----** = No NIST Certificate | **NIST** = NIST Certificate (3 Points)	

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
UNIVERSAL CLIP 50	145430	Capillary Mounting Clip, Plastic, Quantity: 50/Bag
UNIVERSAL CLIP 6	145421	Universal Mounting Clip, Plastic, Quantity: 6/Bag

1.888.610.7664 www.calcert.com sales@calcert.com