

# ELECTRA-flo/FI G5 TRANSMITTER (Version 2.4)

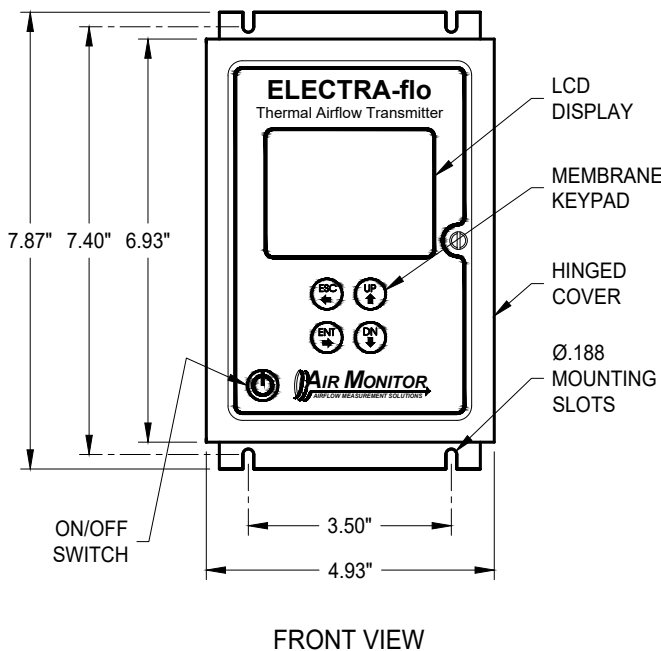
## DUAL OR SINGLE FAN INLET OR FAN WALL CONFIGURATION

### THERMAL AIRFLOW MEASURING SYSTEM

**STANDARD CONSTRUCTION**

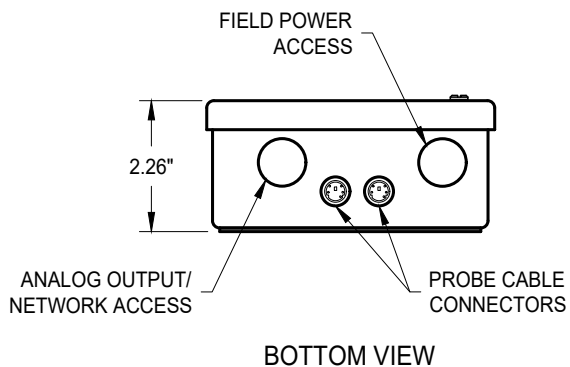
<b>Maximum Number of Sensors:</b>	4 for dual inlet fan, 2 for single inlet fan, 2-32 for fan wall application.
<b>Display:</b>	Backlit, 1/4 VGA (320 x 240), color TFT LCD. 2.75" x 2.0" display size.
<b>Configuration Access:</b>	Field programmable, menu driven user interface accessed via four button keypad. Field selectable in U.S. or S.I. units for velocity / flow and temperature. Password protected.
<b>Power Supply:</b>	24VAC (20-28VAC) or 24VDC (20-40VDC), isolated and fused with reverse polarity protection.
<b>Power Consumption:</b>	16 to 90VA, based on the quantity (1 to 32) of sensor nodes.
<b>Outputs:</b>	Dual analog outputs, field selectable via menu for 0-5VDC, 0-10VDC, or 4-20mA. Single alarm output, field programmable.
<b>Analog Output Scaling:</b>	Field programmable analog output scaling of airflow velocity and temperature. Velocity range for fan inlet applications: 0 to 10000 FPM. Temperature range: 0 to 140°F.
<b>Analog Output Resolution:</b>	0.02%
<b>Analog Output Filtering:</b>	Field programmable over 10:1 range.
<b>Network Output Communication:</b>	BACnet® or Modbus®.
<b>Humidity Limits:</b>	0 to 99% RH, non-condensing.
<b>Temperature Limits:</b>	-20°F to 180°F Storage; -20°F to 140°F Operating.
<b>Electrical Connections:</b>	Terminal strips with plug-in connectors for field wiring. Probe to transmitter connection via shielded plenum rated cable with mini-DIN Snap & Lock connector.
<b>Enclosure:</b>	NEMA 1 aluminum with hinged cover.
<b>Approvals:</b>	UL 60730 pending; BTL pending; FCC Part 15 Subpart B, Class A Device.

**DIMENSIONAL INFORMATION**



A01			A02			BACnet			ALARM			24V POWER			
+	COM		+	COM		A	B	G	SH	NO	C	NC	L	N	G
⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
1	2	3	4	5	6	7	8	9	10	11			1	2	3
J1											J2				

TERMINALS (Located Inside Enclosure)



# ELECTRA-flo PROBE & G5 TRANSMITTER

## CONSTRUCTION OPTIONS

### THERMAL AIRFLOW MEASURING SYSTEM

**Probe**

- Standard - Type 6063 Anodized Extruded Aluminum
- Type 316 Stainless Steel

**Probe Connection Box**

- Standard - Aluminum, NEMA 1
- Polycarbonate, NEMA 4X
- Stainless Steel, NEMA 4X

**Transmitter Enclosure**

- Standard - Aluminum, NEMA 1
- Fiberglass, NEMA 4X, with Clear Lid
- Stainless Steel, NEMA 4X
- Stainless Steel, NEMA 4X, with Window

**Transmitter Cable**

- Standard - 10'    25'    50'    100'

**Cable Connections**

- Standard - Cable with mini-DIN Connectors
- Liquid Tight Cordgrips
- Liquid Tight Flexible Conduit Fittings

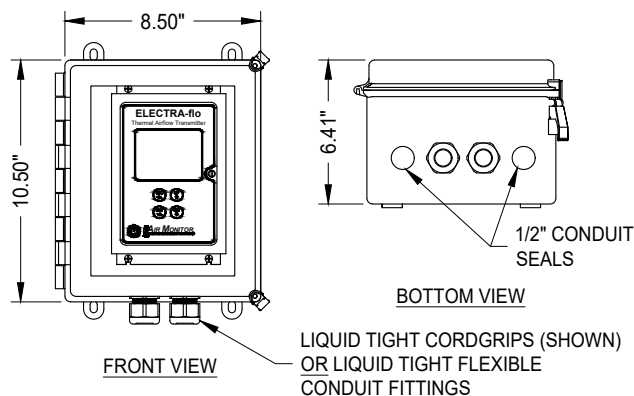
**Network Communications**

- BACnet®    Modbus®

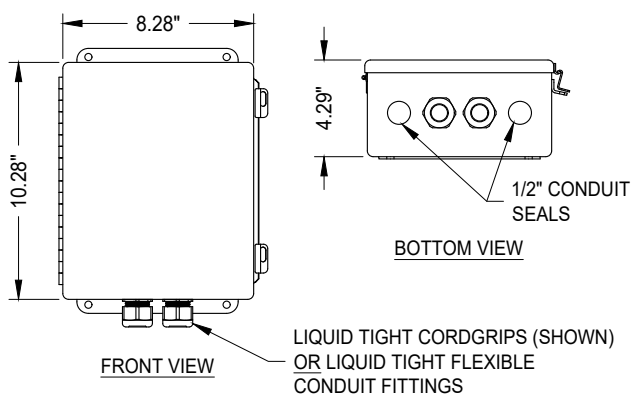
**Transmitter Mounting**

- Standard - Remote
- On ELECTRA-flo Station

**G5 TRANSMITTER ENCLOSURE OPTIONS**

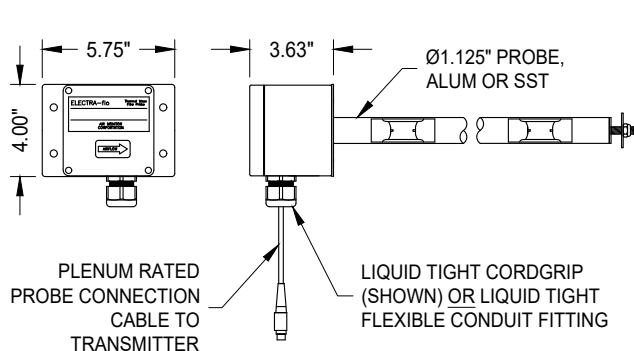


**NEMA 4X - FIBERGLASS**

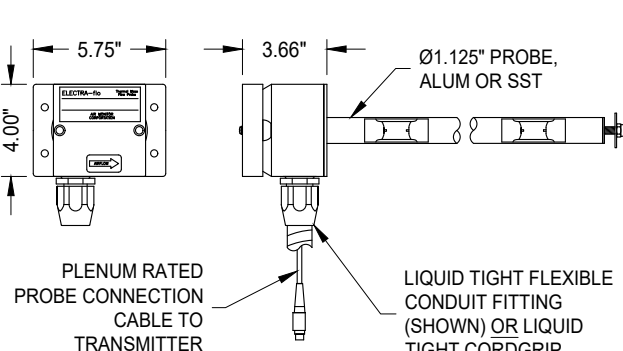


**NEMA 4X - STAINLESS STEEL**

**PROBE CONNECTION BOX OPTIONS**



**NEMA 4X - POLYCARBONATE**



**NEMA 4X - STAINLESS STEEL**

# ELECTRA-flo/FI

## FAN INLET - SINGLE SENSOR CONFIGURATION

### THERMAL AIRFLOW MEASURING SYSTEM

**STANDARD CONSTRUCTION**

<b>Probe:</b>	Type 6063 anodized aluminum. 1-1/8" diameter.
<b>Sensor Housing:</b>	Injection molded polycarbonate.
<b>Sensor Type:</b>	Hermetically sealed, precision matched thermistors with laser trimmed resistive heating element mounted in flow conditioning aperture.
<b>Sensor Signal Processing:</b>	Microprocessor with 12 bit A/D conversion for each sensor node.
<b>Probe Mounting:</b>	Stainless steel, tube-in-tube telescoping support struts. Stainless steel mounting brackets.
<b>Junction Box Construction:</b>	NEMA 4 polycarbonate enclosure with hinged cover and waterproof cable connectors.
<b>Sensor to Junction Box Connection:</b>	Integral plenum rated cable with connector, 10' long.
<b>Junction Box to Transmitter Connection:</b>	Integral plenum rated cable with connector.

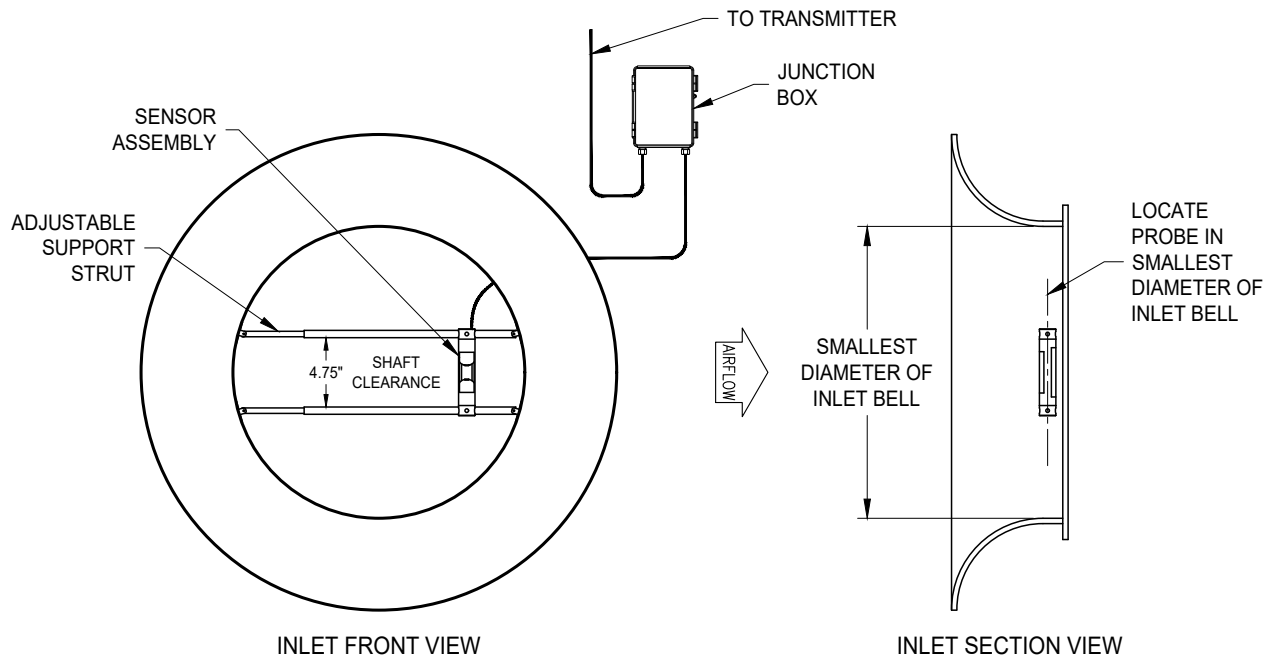
**PERFORMANCE SPECIFICATIONS**

<b>Individual Sensor Accuracy:</b>	±2% of reading
<b>Station Accuracy:</b>	±2 to 3% of airflow, requires field characterization
<b>Sensor Temperature Accuracy:</b>	±0.1 °F
<b>Qty. Calibration Points per Sensor:</b>	6
<b>Velocity Calibration Range:</b>	0 to 10,000 FPM
<b>Operating Temperature:</b>	-20 °F to 140 °F
<b>Operating Humidity:</b>	0 to 99% RH, non-condensing

**CONSTRUCTION OPTIONS:**

Junction Box to Transmitter Cable Length:  
 10'     25'     50'     100'

**DIMENSIONAL INFORMATION**



# ELECTRA-flo/FI FAN WALL

## FAN WALL INLETS - DUAL SENSOR CONFIGURATION

### THERMAL AIRFLOW MEASURING SYSTEM

**STANDARD SYSTEM CONSTRUCTION**

<b>Maximum Number of Fan Inlets:</b>	16 per fan wall.
<b>Number of Sensors:</b>	2 per fan inlet, maximum of 32 per fan wall.
<b>Sensor Construction &amp; Specification:</b>	See ELECTRA-flo/FI, Fan Inlet, Dual Sensor Configuration.
<b>Junction Box Quantity:</b>	One junction box for 2 to 16 sensors, dual junction boxes for 18 to 32 sensors.
<b>Junction Box Construction:</b>	NEMA 4 polycarbonate enclosure with hinged cover and waterproof cable connectors.
<b>Transmitter:</b>	See ELECTRA-flo/FI Thermal Airflow Transmitter.
<b>Sensor to Junction Box Connection:</b>	Integral plenum rated cable with mini-DIN connector, 10' long.
<b>Junction Box to Transmitter Connection:</b>	Plenum rated cable with mini-DIN Snap & Lock connector, 10' long.

**TYPICAL ARRANGEMENT**

