

Analog Output Airflow/Temperature Transmitter Module w/Contact Closure Airflow Alarm



- Compatible with GreenTrol IAT integrated thermal dispersion airflow/temperature sensors
- LCD with pushbutton user interface standard
- Measures airflow and temperature
- Airflow and system status notification alarms
- Two analog outputs and one dry contact relay
- Analog outputs can be assigned to one or two airflow locations, temperature and/or notification alarms.
- Contact closure relay can be assigned to notification alarms
- “Plug and play” operation
- Field adjust wizard facilitates airflow adjustment when conditions warrant
- Fully field configurable

- √ Provide continuous verification of airflow rates
- √ Ideal for monitoring applications
- √ Connect to an application controller to maintain airflow rates and/or temperature
- √ Demonstrate compliance with ASHRAE Standards 62.1, 90.1 and 189.1
- √ Satisfy LEED prerequisites and document code compliance
- √ Improve indoor air quality and thermal comfort
- √ Save energy

The GF-A2000 can be provided with a single integrated IAT-DI duct probe or, one or two integrated IAT-UI or IAT-US universal mount probes.

The GF-A2000 provides a linear analog output signal for the average airflow of one or two probes on analog output AO1. A

second analog output, AO2, can be configured to output the airflow of the second probe for applications where two probes are installed in separate locations. Analog output AO2 can also be assigned to temperature or one of the notification alarms. A contact closure relay is provided that can be assigned to the notification alarms. The GF-A2000 can be configured for I-P or SI units of measure.

Although the transmitter is “plug and play” and operates on power up, it is fully configurable in the field using the pushbutton interface and LCD.

GF-A2000 Transmitter Module Technical Specifications

Functionality

Airflow Measurement: Provides the average airflow rate in FPM [m/s] or CFM [LPS] on the LCD and to analog output AO1 and optionally AO2 when two probes are provided

Temperature Measurement: Provides the velocity weighted or arithmetic average temperature in °F [°C] on the LCD and to analog output AO2 when AO2 is assigned to temperature

Notification Alarms

High/Low Airflow Alarm

System Trouble Alarm

Note: Alarms can be assigned to the contact closure relay or analog output AO2

User Interface

Display: 16-character alpha-numeric LCD

Navigation: 4-button interface

Integrated Sensor Capability

Type: Accepts GreenTrol IAT-DI, IAT-UI and IAT-US Thermal Dispersion Airflow and Temperature Measurement Probe (required). See appropriate IAT product data sheet for probe information.

Available Configurations: IAT-DI Probes

Single Probe: 1 probe x 1 or 2 sensor nodes/probe

Available Configurations: IAT-UI and IAT-US Probes

Single Probe: 1 probe x 1 sensor node/probe

Dual Probe: 2 probes x 1 sensor node/probe

Analog Outputs

AO1

Assignment: Average airflow output signal of connected probes (P1 and/or P2) or P1 if AO2 is assigned to P2

Configurable Ranges: 0-5V, 0-10V or 2-10V

AO2

Assignment: Airflow output signal of P2, average temperature output signal of connected probes or notification alarm

Configurable Ranges: 0-5V, 0-10V or 2-10V

Note: The VDC output circuit can drive the input circuit of devices designed to measure 4-wire, 4-20 mA, current loops with a resistive load ≥ 250 ohms

Contact Closure Relay

R1

Type: Dry contact w/ onboard jumper to drive a remote LED

Assignment: Notification alarms

Status: Normally Open (N.O.)

Rating: 30 VDC or 24 VAC @ 3 amp. max.

Environmental Limits, Power Requirements & Dimensions

Environmental Limits

Temperature: -20 to 120 °F [-28.9 to 48.9 °C]

Humidity: 5 to 95%

Important: Provide a weather-proof enclosure if the transmitter module is mounted outdoors

Power Requirement: 24 VAC (22.8 to 26.4 under load) @8.5V-A

Dimensions: 3.57H x 6.00W x 1.50D in. [90.7 x 152.4 x 38.1 mm]