CAMBRIDGE ACCUSENSE

F600

Pulse Airflow-Sensor F600

Features

- *Cost effective air velocity sensor, at an airflow switch price point*
- *Designed for board-mounted, embedded applications where in-situ airflow sensing is required*
- *Enables inclusion of airflow data while conducting environmental sweeps of critical ASIC temperatures or other temperature sensitive devices on a network card or computing board*
- *Provides a rapid response to fan failure, or airflow blockage, prior to component temperature rise*
- *0.1" pitch design, allows for easy interface to existing fan connections*
- *Available in different air velocity ranges*
- *RoHS Level 6 compliant to meet emerging "green" standard*

About the F600 Series

Designed for board-mounted, embedded applications where in-situ airflow sensing is required, the new F600 allows the PCB to communicate impending shutdowns due to a fan failure or airflow blockage. With mounting pressure from high level clients and organizations to have a more active failsafe, this anemometer gives you real time information to react to potentially critical and costly situations.

With an overall velocity range of 0.5 m/s to 5.0 m/s (100-1000 fpm), the F600 sensor is accurate to ±10% of reading within the range of 200 to 1000 fpm at 25°C. The small sensor height of 0.5" and flush PC mounting are designed to keep the profile as low as possible on the PC board. The slim profile causes minimal distortion of the true airflow picture, and provides excellent measurement of air velocity and airflow temperature measurements across the surface of the board.

The AccuSense F600 Series sensors are also fully interchangeable with one another, as each sensor has its own on-line circuitry to provide normalized performance.

In summary, AccuSense F600 offers real time air velocity and air temperature measurement, filter blockage detection, a small compact packaging design, and an easy interface to existing fan connections. It is designed to comply with NEBS requirements. The F600 Sensor line is a cost-effective and value added solution for all embedded and electronics cooling applications such as Telecom, HVAC, Facility Management, Environmental Monitoring System, etc.

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F600 Series Airflow & Temperature Measurement

Standard medium is air at standard pressure (101.3 kPa, 29.95" Hg). For use with other gases, please contact Degree Controls.

Air Velocity Accuracy

±10% of reading from 200–1000 fpm at 25 °C
±20% of reading over full velocity and temperature range
Repeatability: ±5% under same conditions

Airflow Temperature Accuracy

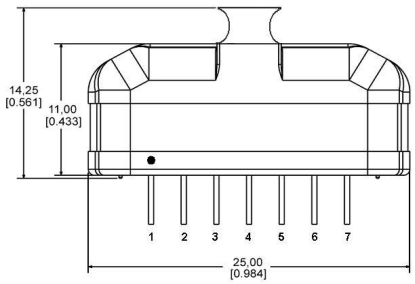
15-60°C ±3°C
Repeatability: ±5% under same conditions

F600 Series General Specifications

Operating temperature	15°C to 60°C
Velocity range	0.5m/s – 5.0m/s (100fpm – 1000fpm)
Acceptance angle	± 45° to axis
Response time	3 seconds
Storage temperature	-40°C to 85°C
Relative humidity (non-condensing)	5-95%
Supply power	+12 VDC, 10ma nominal
Output (user configured)	PWM, TACH, ALARM open drain output
Communication	I2C or UART (3.3v level)
Plastic Cap	UL94-V0

Dimensions & Connection

Dimension
.25"W X .5"H x 1" L



CONNECTOR PINS ASSIGNMENT

PIN#	UART 7 PINS	I2C 7 PINS
1		A0
2		A1
3	GND	GND
4	+12V	+12V
5	OUT	OUT
6	TXD	SDA
7	RXD	SCLK

Part Number Format

F633–C

C = Communication
0 = I2C
1 = RS232

Specifications
subject to change
without notice

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