HAMPSHIRE

CONTROLS

"Safeguarding Your Precious Biological Materials"

AIR FLOW MONITOR

WARNING •ADJ POWER

ALARM

MUTE   *CAUTION: ADJUST ONLY AT KNOWN AIR FLOW

Air Flow Monitor & Alarm

FEATURES:

- Extensive air flow range covered with low range (50 to 500 FPM) and high range (500 to 2500 FPM) probes

- Audible and visual alert status indicators

- Relay contact output to activate central alarm systems and automatic notification systems

- Easily accessible probe, power, and relay connections

AVAILABLE OPTIONS:

- Low Range (LR: 50 to 500 FPM) or High Range (HR: 500 – 2500 FPM)

- On-demand 6-minute audible alarm muting

- Adhesive VELCRO® mounting or interlocking wall mounting bracket

PRODUCT DESCRIPTION:

Hampshire Controls' Air Flow Monitor (AFM) is a single probe instrument used for continuous monitoring of mass air flow levels within laboratory biocontainment cabinets, fume hoods, laminar flow hoods, and ventilation systems.   The AFM includes audible and visual alarms and a relay output to activate remote alarm and automatic notification systems.

A single 5/16" (8 mm) diameter, rapidly and repeatably responsive probe is inserted into the air stream. A setpoint is established at the low end of the acceptable air flow range just above the desired low air flow alarm threshold. If the air flow rate drops to the setpoint, a yellow WARNING indicator is initiated. If the air flow remains below the setpoint for more than 7 seconds, then a red ALARM indicator begins flashing, an audible alarm is initiated, and the SPDT output relay is thrown.

The nominal air flow range for the Low Range AFM is 50 to 500 feet per minute (FPM) (15 to 150 meters per minute), and for the High Range AFM is 500 to 2500 FPM (150 to 760 meters per minute). The AFM is intended for use in normal room and laboratory temperature environments: ~64 ° F (18 ° C) to ~82 ° F (28 ° C). Other temperature and air flow ranges are available by special request.

Custom programming and packaging can be provided to satisfy any air flow monitoring application.

•MADE IN• •USA•

	Low Range (LR)	High Range (HR)
Range (Feet Per Minute (FPM))	50 – 500 FPM	500 – 2500 FPM
Range (meters per minute)	15 – 50 meters per minute	150 – 760 meters per minute
Sensor & Probe	Two 100-ohm RTDs 5/16" (8 mm) diameter, 7.5" (190 mm) stainless steel sheath 10' (3 m) lead	
Working Temperature Range	64 – 82 °F (18 – 28 °C)	

Alarm	Frequency	Amplitude	User-adjustable initial alarm delay period
Audio	~2.9 kHz	105 dB at 30 cm	6-minute, on-demand mute period (MUTE button). Extended mute periods available by special request.

LEDs	
WARNING	Steady YELLOW whenever air flow is below setpoint.
ALARM	Flashing RED, ~1 Hz when in alarm mode (~7 seconds after air flow goes below setpoint)
MUTE	Flashing BLUE, ~1 Hz during mute period (~6 minutes after hitting MUTE button)
POWER	Flashing GREEN, ~1 Hz during power up period (~24 seconds, all other LEDs steady on) Steady GREEN after power up period

Probe, Power, and Relay Connections

Output Relay		
SPDT Relay	Form C – user selectable normally open (NO) or normally closed (NC). Relay thrown in alarm condition (air flow below setpoint for >7 seconds).	
SPDT Relay Electrical	DC	AC
UL Rated Load	1 A @ 30 VDC	0.5A @ 125 VAC
Maximum Switched Power	30 W	62.5 VA
Maximum Switched Voltage	220 VDC	250 VAC
Max. Switched/Carry Current	1 A switched, 2 A carry	

	Load	Supply
Power Requirements	12 Vdc, 600 mA max	100-240 VAC, 50/60 Hz, 0.40 A max, 2-prong US, UL listed

Mechanical & Environmental		
Mounting Options	**Standard:** Adhesive VELCRO® mounting strips (included)	
	Optional: Interlocking mounting bracket (order with **P/N 60834**)	
Dimensions WxHxD	5 x 4.25 x 1.75 in. (127x108x44 mm)	
Weight	1 lbs. (465 g)	
Case	Black Bakelite	

One-year warranty on all Hampshire Controls products.

About Us: Established in 1975, Hampshire Controls provides standard and custom-designed electronics to the biomedical and industrial markets. In addition to the **Air Flow Monitor/Alarms,** our product portfolio includes:

- **MPS Multi-Probe Monitor/Alarms**
- **TT-150/200** temperature & humidity Wi-Fi transmitters
- **LD-215 Liquid Nitrogen Level Detector/Alarms**
- **T° Sentry Model 140** single probe temperature monitor/alarms
- **STEDIVOLT SV2005 Line Voltage Controls**
- Customized OEM electronics design and manufacturing

- **T° Sentry *ALERT* Monitoring System** data logging
- CO_2, LN2 **CA5000 Freezer Backup Systems**
- **TC-25 & TC-25+ TEMPCHECK Rapid Response Thermometers**
- **ADM-215 Remote Alarm Delay Modules**
- Customized monitoring, alarm notification, and logging

MADE IN USA