

Airflow Monitor
AFA1000/2



helping you create a safer environment in your workplace

a breath of fresh air.....

AFA1000/2 Series Airflow Monitors

General Description

The AFA1000 series of airflow monitors and controls are designed to ensure the Safety of the users of:

[FUME CUPBOARDS](#)

[FUME HOODS](#)

[BIOLOGICAL SAFETY CABINETS.](#)

The AFA1000/2 is a digital airflow monitor that is designed for applications where pushbutton functions are required and is available with a range of remote unique airflow sensors that are used to measure Face Velocities or Duct Velocities. The sensor has no inherent drift and will provide stable readings over many years of operation without re-calibration.



AFA1000/2

- Digital display of face velocity in m/sec, fpm or plain text
- LED indication of Safe and Alarm conditions
- Pushbutton calibration and configuration with Password protection
- Plug in connections for power supply and airflow sensor
- 3 Programmable output relays
- 3 Programmable inputs
- 3 Programmable Pushbuttons
- Com port for local or network connection
- Modbus RTU and BACnet coms on board
- Optional Temperature feature with continuous temperature display with High and Low temperature alarms

Features:

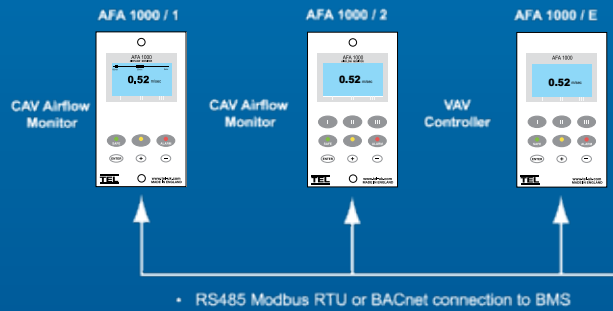
DIGITAL DISPLAY	Continuous velocity display in m/sec, fpm or plain text Fault timeline over last 60 minutes or Velocity Bar Graph Alarm warnings e.g. Air Fail, Sash High...etc Calibration and Configure menus – password protected Calibration with on screen instructions
AUDIO VISUAL ALARM	Audible Alarm with Red, Amber and Green LED's
3 RELAY INPUTS	Configurable as: Night Setback Alarm Disable Sash High External Alarm Hi/Low Temperature sensor (optional) Sash Warning
3 PUSHBUTTONS	Configurable as: Fan On/Off Lights On/Off UV Lights On/Off Pump On/Off Purge On/Off Setback OR On/Off Gas Solenoid On/Off Sockets On/Off Emergency On/Off
COM PORT	RS485 for connection to a laptop for diagnostics and configuration of the alarms For connection via a local network for remote monitoring, control and data logging using AFAlive PC software or for connection to a BMS system. Modbus RTU and BACnet coms on board

AFA1000/2 Series Specification

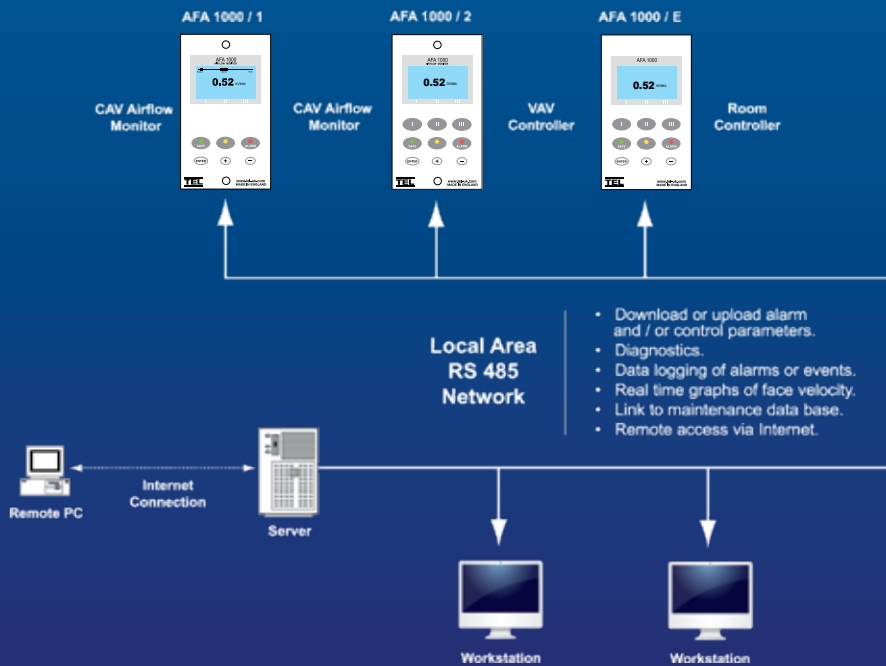
Specifications

	AFA1000/2 Mk2	AFA1000/2 Mk3
Alarm Range	0.15-5.00m/s (30-999fpm) remote SM6 or ILS Airflow sensor	0.15-5.00m/s (30-999fpm) remote SM6 or ILS Airflow sensor
Field Set up	2 Point velocity calibration with on screen instructions	2 Point velocity calibration with on screen instructions
Accuracy	Face Velocity +/-5%	Face Velocity +/-5%
Airflow Sensor	Integral Airflow Sensor or remote SM6 / ILS	Integral Airflow Sensor or remote SM6 / ILS
Pushbuttons	3 Configurable pushbuttons	3 Configurable pushbuttons
Relay Output	3 Configurable outputs	3 Configurable outputs
Alarm Delay Times	Configurable 0-60 seconds	Configurable 0-60 seconds
Relay Input	3 Configurable inputs	3 Configurable inputs
Com Port	RS485 com port Modbus RTU and BACnet	RS485 com port Modbus RTU and BACnet
Sash High Alarm	Yes with alarm repeat	Yes with alarm repeat
Night Setback	Yes – relay input	Yes – relay input
Display	Digital velocity display fpm / m/sec 3 x LED's (Safe/Caution/Alarm) Red LED with Audible alarm	Digital velocity display fpm / m/sec 3 x LED's (Safe/Caution/Alarm) Red LED with Audible alarm
Alarm Indication	Red LED with Audible alarm	Red LED with Audible alarm
Horn Silence	Temporary or Permanent	Temporary or Permanent
Mounting	Fully flush	Semi flush
Monitor Operating Temperature range	13-30°C 55-86°F	13-30°C 55-86°F
Airflow sensor Operating temperature	15-25°C 59-77°F	15-25°C 59-77°F
Airflow sensor Working temperature	Ambient +25°C/77°F	Ambient +25°C/77°F
Storage temperature	-40-65°C -40-150°F	-40-65°C -40-150°F
Agency Listings	CE RoHS	CE RoHS
Hazardous Area (Remote Airflow sensor or pressure switch)	Gas group IIC Temp Class T6 With Atex certified I.S Zener Barriers	Gas group IIC Temp Class T6 With Atex certified I.S Zener Barriers

Connection to BMS systems



Connection to PC for diagnostics / data logging / alarm configuration



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All AFA1000 series Airflow Monitors and Controllers can be connected via the RS485 com port to a PC/Laptop or to a BMS.

The output from the com port uses the Modbus RTU or BACnet MS/TP protocol.

Our AFA Network software allows a PC or Laptop user connected to the Modbus network to access individual controllers or groups of controllers for the following:

Functions

- Download or Upload - Alarm and Control Parameters
- Diagnostics
- Data logging of alarms or events
- Real time graphs of face velocity / pressure
- Link to maintenance database
- Remote access via internet
- Connection to BMS