



# AFA4000 Fume cupboard controller/monitor Data Sheet



**TEL's AFA4000 is a pioneering airflow controlling and monitoring system developed to ensure the safety of users, working with industrial and educational fume cupboards and biological safety cabinets. The AFA4000 airflow monitor and controller is available with optional Auto Sash integration. Using the Auto Sash with the AFA4000 controller means you will no longer need a separate Auto Sash keypad.**

With a full colour, intuitive user interface that has been optimised for user experience, the AFA4000 is easy to navigate and features a simple two-step calibration process with on-screen prompts to guide end users. The unrivalled reliability of the AFA4000 means that once calibrated, you won't need to re-calibrate in the future. The AFA4000 has comms built-in as standard and can be used with either Modbus or BACnet protocol.

Featuring an innovative hot wire sensor, the AFA4000 has no inherent drift meaning that the sensor will provide stable readings over many years of operation ensuring reliability and safety.

With full alarm diagnostics and test functionality, a sixty minute timeline of environmental conditions and field software upgradable, the AFA4000 provides today's modern professional with the confidence and peace of mind they need to get on with the job at hand

#### Latest upgrade features include:

- New Screen – double the screen resolution of current version
- New 'snap fit' design of the case, easier to fit
- More sturdy GRP mounting bracket (glass reinforced plastic)
- Improved communication speed
- Enhanced PID algorithms
- More user friendly/intuitive menu structure
- Higher Analogue to Digital conversion on input sensors

#### FEATURES INCLUDE

- Full colour 3.5" LCD Display for continuous velocity reading in m/sec
- Auto Sash integration
- Three programmable push buttons
- BACnet and Modbus on board
- Velocity bar graph or fault time line over the last 60 mins
- Visual & audible alarms
- Three digital inputs and three digital outputs
- Emergency Night setback push button
- Diagnostics Menu
- Volumetric measurement
- Energy cost reduction of up to 85%
- Bespoke overlay designs, with a choice of three different coloured cases
- Bespoke software options tailored to customer requirements
- Touch sensitive buttons



## AFA4000 Specifications

	AFA4000
<b>Alarm Range</b>	0.20 - 2.00 m/s remote SM6 or ILS Airflow sensor
<b>Control Range</b>	Face Velocity control 0.20 – 2.00 m/sec
<b>Control Resolution</b>	0.01 m/sec
<b>Control Response</b>	< 2Seconds
<b>Control Output 1</b>	0-10/2-10VDC Control output For Damper, valve or Inverter drive
<b>Control Output 2</b>	0-10/2-10VDC Control output For Bleed or Supply Air Damper/Inverter or 0-10VDC Volumetric Output
<b>Field Set up</b>	Two Point velocity calibration with on screen instructions
<b>Accuracy</b>	Face Velocity +/-5%
<b>Airflow Sensor</b>	Remote SM6 / ILS (In-line Sensor)
<b>Pushbuttons</b>	Three Configurable pushbuttons
<b>Digital Output</b>	Three Configurable outputs
<b>Digital Input</b>	Three Configurable inputs
<b>Com Port</b>	RS485 com port Modbus RTU and BACnet
<b>Display</b>	Digital velocity display m/sec Graphical display (Green / Safe, Amber / Caution, Red / Alarm)
<b>Alarm Indication</b>	Red graphic with Audible alarm
<b>Mounting</b>	Semi flush



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Monitor Operating Temperature range	13-30 °C
Airflow sensor Operating temperature	15-30 °C
Airflow sensor Working temperature	Ambient +30 °C
Storage temperature	-30-65 °C
Agency Listings	CE RoHS
Hazardous Area (Remote Airflow sensor)	Gas group IIC Temp Class T6 With Atex certified I.S. Zener Barriers
Connections	Flying leads with plug in connections
Night Setback	Digital input activation
Sash High	Digital input activation via proximity sensor or micro switch

Part Number Guide:   **AFA4000/1**      **AFA4000/1/AS**  
                              **AFA4000/2**      **AFA4000/2/AS**  
                              **AFA4000/E**      **AFA4000/E/AS**

