



1036 Parkway Ct.
Buford, GA 30518
www.locscientific.com

Phone: 770-932-0202
Fax: 770-945-0041
info@locinc.com

Airflow Monitor

LOC1000 MK3

General Description

The LOC1000 model is a fully flush mounting airflow monitor that is suitable for Industrial Fume Cupboards, Schools type Fume Cupboards, Canopy Hoods, BSC's and LEV's and includes the following features:

Back lit graphic display with a visual area of 56x27mm showing the airflow velocity (fpm or m/sec) or airflow status (Air Safe / Air Fail). In an alarm condition the display will toggle between the airflow velocity and alarm condition.

Audio Visual Alarm – Audible alarm with Red, Amber and Green LED's.

Password protected pushbutton set up and calibration menus with on screen instructions

3 Relay Inputs configurable as:- Night Setback / Alarm Disable / Sash High / External Alarm / High-Low.

1 Relay output activated by any of the 3 inputs or any of the alarm conditions.

Com Port – RS485 for connections to a laptop for diagnostics and configuration of the monitor or for connection via a local Modbus RTU network for remote logging with real time graphical displays using the AFA Network software or for direct connection to a BMS system.



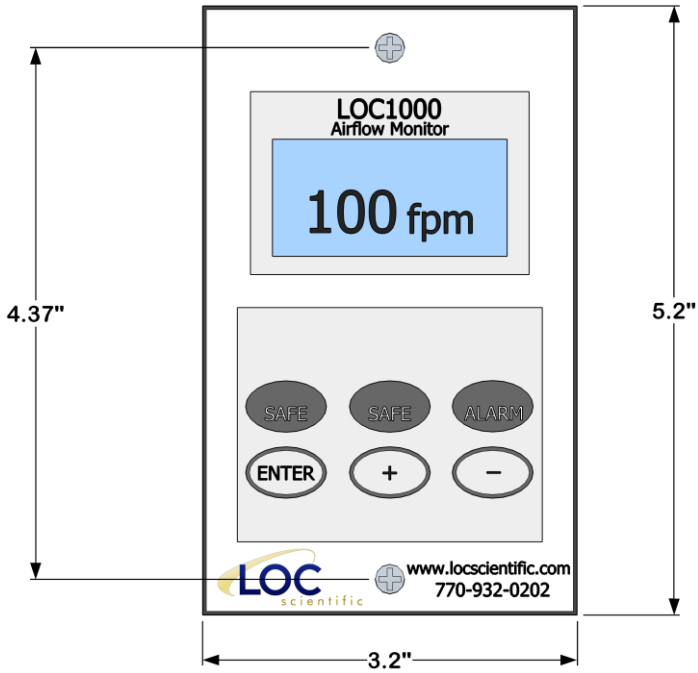
1036 Parkway Ct.
Buford, GA 30518
www.locscientific.com

Phone: 770-932-0202
Fax: 770-945-0041
info@locinc.com

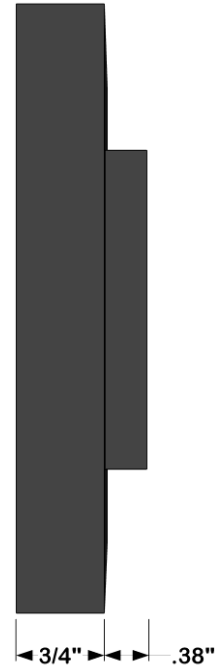
Specifications

Display range	0-1.5 m/s (0-1000fpm)
Alarm range	0-1.5 m/s (0-200fpm)
Field set-up	2-point velocity calibration (with on-screen instructions)
Accuracy	Face velocity accuracy +/- 5%
Alarm delays	User configurable – 0 to 10secs
Relay output	1 On board (3 available on option Relay Interface Unit)
Analog output	0-10V output directly proportional to velocity (Optional)
Relay input	3
Comm. Port	RS485 – Can be connected via Serial interface to LAN network (Full software available)
Sash high indication	Yes, with separate plug-in connection
Night setback	Yes
External alarm indication	Yes
Power Requirement	Input—240VAC, 50Hz (UK) 230VAC 50Hz (Euro) 120VAC 60Hz (US) Output—15VDC, 500ma
Units	English and Metric (user selectable)
Display—visual	Analog bar graph LEDs: red, alarm; yellow, caution; green, normal Digital display of velocity reading (can be turned off)
Alarm indication	Red LED & audible alarm (to a certain sound spec)
Horn silence	Yes (temporary / permanent/automatic depending on type of alarm or external input)
Mounting	Flush (or surface with optional mounting box)
Monitor operating temp	55-86°F (13-30°C)
SM6 operating temp	15-25°C (Environmental limits)
SM6 working temp	ambient +25°C
SM6 output mV	0-90 mV over working range (0-1.5m/sec).
Storage temperature	-40-150°F (-40-65°C)
Agency listings	CE
Hazardous area	SM6 Suitable for Gas group IIC Temp Class T6 (With Atex certified MTL Zener Barriers).

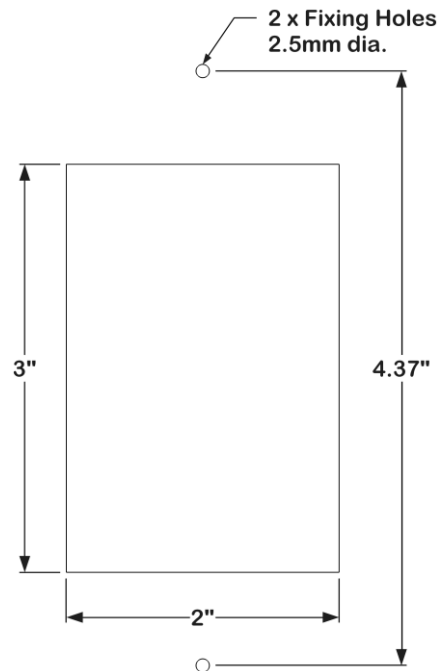
Dimensions



Front View



Side View



Panel Cutout Dimensions



1036 Parkway Ct.
Buford, GA 30518
www.locscientific.com

Phone: 770-932-0202
Fax: 770-945-0041
info@locinc.com

Ordering Options

1	Mk3	UK	SM6	2M	MCP
Model	Style	Power Supply	Airflow Sensor Type	Sensor Cable	Comms
1	Mk3	US 120v 60Hz	SM6	2M	M-RS485
		Euro 230v 50Hz	12150	5M	MPC (Modbus RTU)
		UK 240v 50Hz	1LS		

Power Supply

The LOC1000 Airflow monitor is supplied complete with a plug in type power supply for connection to a single gang socket. The mains supply should be fused 3A. A desktop style power supply can be supplied with flying mains lead for connection to a fused spur or terminals.

Airflow Sensor

The standard LOC1000 is supplied with a remote type airflow sensor and has a plug in RJ11 socket on the rear of the case to accept the sensor cable.

A vent it can be supplied for connection to the Fume Cupboard inner sidewall, this comprises of 1M of 25mm vent tube, a 25mm Bush and Coupling and box lid. See EVK on accessories page.

Sensor Cable

The standard length of a remote type sensor cable is 2M, a 5M version is also available. Custom lengths can be supplied on request.

Comms

The LOC1000 can be supplied with configuration software and cable for connections to a laptop for diagnostics and configuration of the monitor or for connection via a local Modbus RTU network for remote logging with real time graphical displays using the AFA Network software or for direct connection to a BMS system. See Modbus RTU Comms on additional features page.



1036 Parkway Ct.
Buford, GA 30518
www.locscientific.com

Phone: 770-932-0202
Fax: 770-945-0041
info@locinc.com

Additional Features

The LOC1000 airflow monitor range includes the following additional features:

Mains Fail alarm – Audio visual alarm in the event of power loss

Battery Back Up – Full back up in the event of power loss

Temperature monitoring with High and Low Temp Audio visual alarms

0-10v Retransmission output over full scale (0-10v / 0-1m/sec)

Relay Interface Unit – Additional remote output relay unit in enclosure

Modbus RTU Comms – For connection to AFA Network or BMS

The LOC1000 can be supplied with a custom overlay (details on request).

Accessories

The LOC1000 airflow monitor range includes the following accessories:

Surface mounting back box

EVK Vent Kit

Sash High Proximity Switch

Sash High Micro Switch

Airflow sensor options

The LOC1000 airflow monitor will operate with any of the following airflow sensors:

SM6 Airflow Sensor

12150 Duct Sensor

ILS Airflow Sensor