

Features:

- Single or dual channel fire detection
- Multiple configuration options
- Multiple detection strategies
- Up to 100m per sampling pipe
- Microprocessor controlled
- Highest fan capacity in its class
- Integral display and programmer
- Field serviceable air filter
- Adjustable aspirator speed with airflow monitoring
- IP65 enclosure



The ICAM IAS Air-Sampling Smoke Detection systems provide a flexible solution to meet the unique needs of numerous applications including industrial spaces such as cable tunnels, the tamper-proof and unobtrusive requirements of special accommodation, or can simply be used to replace spot (point) detectors in office environments.

How it Works

The IAS systems actively draw air from the protected area through sampling holes in a pipe network. Sampled air is then filtered before being analyzed by conventional or analog point detectors incorporated in the systems. The IAS system is available with one inlet pipe (IAS-1) or two inlet pipes (IAS-2), and can be fitted with one or two detectors per system.

The systems utilize a high performance aspirator and software configurable flow monitoring circuitry. Air flow level is displayed on a ten element bar graph that can be adjusted for high and low flow thresholds, and flow failure is reported as a device fault via relays to the loop.

Detection Strategies

The systems may be configured for a number of detection strategies including:

- single or dual addressable area detection
- redundant detection
- multi-criteria detection
- coincident or double-knock detection

In circumstances where the premises are already protected by point detectors, the IAS system is easily introduced onto the existing fire alarm control panel signaling circuit by fitting equivalent detectors into the system.

Detector Configuration Options

Several configuration options are available for the IAS-1 and IAS-2 systems:

- IAS-1 system – one or two spot (point) detectors
- IAS-2 system – two spot (point) detectors

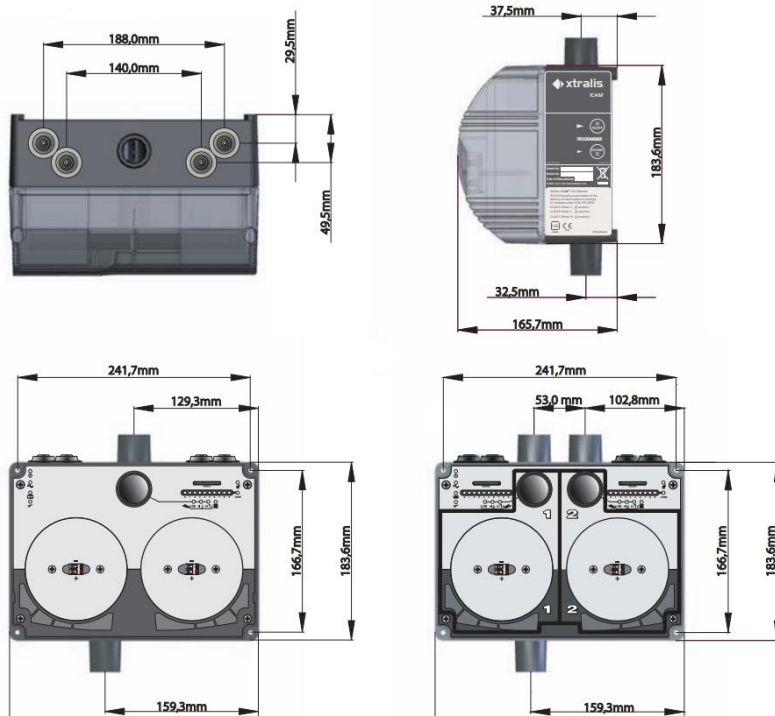
IAS-1 systems fitted with one spot (point) detector are capable of providing single area detection, but IAS-1 and IAS-2 systems fitted with two detectors are able provide a number of detection strategies. The table below describes the recommended configuration options to fit the selected detection strategy when two spot (point) detectors are fitted into an IAS system.

Two Detector Strategy		IAS-1	IAS-2
	Dual Addressable Areas		✓
	Redundancy	✓ (OR)	✓ (OR)
	Multi-criteria	✓ (OR / AND)	✓ (OR / AND)
	Coincident / Double-Knock †	✓ (AND)	✓ (AND)

† Subject to local codes and standards

Note: (OR / AND) represents the suggested boolean logic for combining two detectors to achieve detection strategy

Dimensions



Specifications

Supported Detectors	<ul style="list-style-type: none"> - 1 or 2 analog addressable or conventional spot (point) detectors - a variety of detector technology types (photoelectric, ionization, heat, CO, etc.) - spot (point) detectors with universal screw mounting
Supply Voltage	24 VDC nominal (18 to 30 VDC) <i>Note; spot (point) detectors are powered from the signaling circuit</i>
Current	300 mA (max)
Dimensions (WHD)	259 mm x 184 mm x 166 mm
Operating Conditions	Temperature; -10 to 60°C Humidity; 10 to 95% RH (non-condensing)
Inlet Pipe Size	Outer Diameter – 25mm Inner Diameter – 21mm
Sampling Network	Pipe Length: Up to 100m per inlet <i>Pipe Length may vary subject to specifications by local codes and standards.</i>
IP Rating	IP65
Filtration	Serviceable filter External filter optional
Flow Monitoring and Reporting	High and Low adjustable
Fan	Control: 10 programmable speeds Pressure: 250 Pa
Relay Outputs	IAS-1 – 1 fault relay IAS-2 – 2 fault relays

Ordering Information

Part Number	Description
ICAM-IAS-1-AU	ASD Aspirating Smoke Detector – Single Channel
ICAM-IAS-2-AU	ASD Aspirating Smoke Detector – Dual Channel
ICAM-06-NF10	Baffle for Notifier FSP-851 – Pack of 10