

ADDRESSABLE FAAST FLEX™

ASPIRATING SMOKE DETECTION



Description

Addressable FAAST FLEX offers a highly flexible and cost-effective ASD solution for a wide range of applications such as small to medium warehouses, cold storage, elevator shafts, ceiling and underfloor voids, transformer and electrical rooms, restrooms and the like. Addressable FAAST FLEX provides consistent detection with minimum nuisance alarms to reduce operational costs enabled by improved detection chamber design.

Addressable FAAST FLEX offers flexible configuration options. Users can choose an out-of-the-box solution with a 10-line DIP switch with no special tools required, or the extended mode using the SmartConfig BT app and FACP, which expands the range of available settings.

Addressable FAAST FLEX is easy to install with reduced effort and time; 1-man installation with an installation template, different orientations, direct wall-mounting and ample room for wiring. Through its modular design and field replaceable components, Addressable FAAST FLEX allows convenient in-field service and maintenance, thus minimizing downtime and reducing ongoing maintenance costs.

Addressable FAAST FLEX features a clean, functional interface with 1 power LED, 1 fault LED, and for each channel, 1 alarm LED plus 1 module LED (blinking when polling), refer to the Product Guide (Doc. No. 38064) for details. Upon opening the main cover, the command interface is revealed: 10 DIP switches for configuration, 4 buttons for interaction, and 1 USB port for log download and firmware upgrade.



How It Works

Air is drawn into the Addressable FAAST FLEX detector through a network of air sampling pipes by speed adjustable aspirator. Each pipe inlet has an airflow sensor that monitors airflow changes in the pipe. Inside the Addressable FAAST FLEX detector, a sample of air is filtered and passed into the detection chamber and analysed for the presence of very small amounts of smoke. Air is exhausted from the Addressable FAAST FLEX detector and may be vented back into the protected zone through an exhaust pipe.

Detection Technology

The Addressable FAAST FLEX detection technology is based on LED light scattering technology. The technology offers high sensitivity Blue LED and Photodiode for enhanced sensitivity and a dual optical path to increase detection performances. In addition, dual stage mesh filtration for removing dust particles and lint from air sample as well as preventing foreign objects from entering the exhaust.

Features

- Reliable smoke detection for consistent performance and minimum nuisance alarms
- Single & Dual channel variants with area coverage up to 1,600m² (17,200 sq.ft) for single channel and 2,000m² (21,527 sq.ft) for dual channel
- Double knock capability (Dual Channel) for coincident detection
- Pipe length (Pinnacle Mode) up to 210m (689 ft) in single channel, and 420m (1,378 ft) in dual channel allowing extended coverage and convenient detector mounting
- Class A, B, C performance allowing:
 - Single channel: 6, 16, 30 (Pinnacle) holes respectively
 - Dual channel: 12, 32, 48 (Pinnacle) holes respectively
- An ultrasonic flow sensing element per chamber for accurate and reliable flow detection
- A metallic mesh filter per chamber for optics protection and improved detector longevity
- Alarm, General Purpose Output (GPO) and Fault relays per channel for connection to FACP and BMS systems
- Simplified and intuitive LEDs user interface for immediate status indication
- Pre-engineered pipe networks for hassle-free and expedient design and installation
- Three configuration modes:
 - One out-of-the-box mode with a built-in, user-friendly control mechanism for fast commissioning
 - Two extended modes using either the FACP panel or the SmartConfig App, providing enhanced user experience
- Modular design with in-field replaceable chamber, filter and aspirator for ease of service and maintenance
- Installation template, different mounting orientations (upright, inverted) and ample wiring room to save time and effort
- Suitable for cold storage environments with -40 °C (-40°F) operating temperature
- Bluetooth interface with mobile device App for extended configuration options and rapid diagnostics
- General Purpose Input (GPI) for remote Reset, Disable, External Fault
- Password protected access for secured detector operation, diagnostics and maintenance
- IP40 rating for protection against ingress of foreign bodies
- Onboard event log up to 2,100 events for user actions and smoke trends
- Backward compatible with OEM Panels

Listings / Approvals

- VdS
- EN 54-20, ISO 7240:20
- CE
- RED

ADDRESSABLE FAAST FLEX™

TECHNICAL SPECIFICATIONS



Installation Design

Installation design is performed using the simulation software “FAAST FLEX ASPIRE,” which allows users to select the device and version they wish to design with. ASPIRE is a full-featured suite that delivers precise calculations of flow, dilution, pressure, and transport time, along with a complete Installation Data Pack (IDP) and detailed Bill of Materials (BOM).

Firmware Upgrade Tool

Addressable FAAST FLEX offers a fast and easy firmware upgrade solution. New versions are downloaded to a USB drive; the user simply plugs in the drive and presses a button. The device then completes the upgrade automatically, no additional steps required. A dedicated crypto-chip authenticates the firmware before it is copied, ensuring only trusted versions are installed.

SmartConfig App (FAAST FLEX Bluetooth App)

The SmartConfig app enables users to configure and monitor Addressable FAAST FLEX detectors on site. It provides live status updates for each detector, including airflow and recent events, all accessible from a mobile device. The app also expands the range of available configuration settings. For full details, please refer to the SmartConfig Product Guide.

Architect/Engineer Specifications

General Specifications

Flow Sensor Number	1 per channel		
Level of Alarm	Action and Alarm per channel		
Fan Setting	Adjustable		
Area Coverage	Single Channel Model: 1,600m ² (17,200 sq.ft) Dual Channel Model: 2,000m ² (21,527 sq.ft)		
Pipe Network Layout	Single Channel Model:	Linear pipe length:	1 x 105m (1 x 344 ft)
		Branch pipe length:	2 x 105m (2 x 344 ft)
	Dual Channel Model:	Linear pipe length:	2 x 105m (2 x 344 ft)
		Branch pipe length:	4 x 105m (4 x 344 ft)
Sampling Holes	Single Channel Model: A, B, C: 6, 16, 30 (Pinnacle)		
	Dual Channel Model: A, B, C: 12, 32, 48 (Pinnacle)		
General Purpose Input (GPI)	Reset, Disable, External Fault		
Out-of-Box Configuration	DIP Switches		
Field Replaceable Components	Sensing Module, Metal Filter, Front Cover, Aspirator, Internal Covers and Adaptor Set		
Data Logging	Device Info, Device Configuration, Device Status Logged Events and Data		
Communication	USB & Bluetooth		

Electrical Specifications

Detector Dynamic Sensitivity	
Supply Voltage	24Vdc (19-30Vdc)
Maximum Power Consumption	Single Channel Model: 400mA @24Vdc
	Dual Channel Model: 450mA @24Vdc
Relays	3 per channel, Alarm, GPO and Fault 2A @30V
Detector Sensitivity Range	0.05%obs/m to 0.656%obs/m (0.014%obs/ft – 0.2%obs/ft)
Electrical - Panel loop	
Operating Voltage Range	15-32 VDC (24 V Nominal)
Maximum Standby Current	Single Channel Model: 450 µA @24V and 25°C (No communication)
	Dual Channel Model: 680 µA @24 V and 25°C (No communication)

Environmental Specifications

Operating Conditions	
Operating Temperature	-40 °C to 55 °C
Sampled Air Temperature	-40 °C to 55 °C
Humidity	10-93% RH
Ingress Protection Rating	IP40

Mechanical Specifications

Dimensions (WHD)	205mm X 280mm X 80.5mm
Weight	1.7Kg
Display Panel	LED

Ordering Information

Device Ordering Code	Description
FLX-010-EI	Addressable FAAST FLEX Single Channel
FLX-020-EI	Addressable FAAST FLEX Dual Channel

Spare Parts

Spare Parts Ordering Code	Description
FLX-SP-01NG	Addressable FAAST FLEX Sensing Module
FLX-SP-02	Addressable FAAST FLEX Metal Filter (pack of 6)
FLX-SP-03-EN	Addressable FAAST FLEX Front Cover
FLX-SP-04	Addressable FAAST FLEX Aspirator
FLX-SP-05-COM	Addressable FAAST FLEX Internal Cover Set
FLX-SP-06	Addressable FAAST FLEX Adaptor Set