

FEATURES

- ✓ Pinpoint addressability with better sensitivity than spot detectors
- ✓ 40 addressable microbore tube sampling holes
- ✓ Enhanced and standard sensitivity settings for the sampling holes
- ✓ Single hole blockage detection
- ✓ End to end sampling tube integrity monitoring
- ✓ Centralised testing and maintenance
- ✓ Variable length capillary tubes, up to 100m
- ✓ Laser-based absolute smoke detection
- ✓ Clean air barrier for optics protection
- ✓ Reliable linear pump technology
- ✓ LEDs for alarm and fault signaling
- ✓ 3.5" colour touch screen for status review
- ✓ Seven programmable relays
- ✓ Two GPI's, monitored and unmonitored
- ✓ Xtralis VSC and VSM4 PC software support
- ✓ iVESDA software support for compatible iOS and Android devices
- ✓ IP40 enclosure
- ✓ Easy mounting with optional steel support bracket
- ✓ Field replaceable smoke sensor module, pump, valve and filter
- ✓ VESDAnet networking
- ✓ Ethernet 100 base T
- ✓ WiFi, 802.11 b/g/n
- ✓ Local host-mode USB port
- ✓ Easy cable termination access
- ✓ Event Log (20,000 events)



PRODUCT DESCRIPTION

The VESDA-E VEA series of detectors combine VESDA reliability and early warning smoke detection with pinpoint addressability and a variety of annunciation options that truly surpass traditional spot detectors.

They use patented air sampling points and multi-channel microbore air-sampling with enhanced or standard alarm sensitivity setting for the sampling points. As a multi-channel addressable system, the VEA detector is able to divide a protected space in to sampling locations, enabling the localization of a fire for faster incident response.

The detectors are suitable for protection of areas where pinpoint location of fire events is essential, thus providing ideal fire detection solutions for offices, hospitals, schools, prisons, multi-story dwellings, cabinets in data centers and warehouse racks. A wide range of features provide flexibility, field programmability, enhanced connectivity and reduced total cost of ownership.

The VEA-040-A10 detector features a 3.5" colour LCD display which provides a range of status information including alarm and fault conditions as well as smoke levels. Screens for each type of information are available using a simple navigation system.

VESDA detectors and devices communicate on VESDAnet which provides a robust bi-directional communication network allowing continued redundant operation even during single point wiring failures. VESDAnet enables primary reporting, centralized configuration, control, maintenance and monitoring.

VESDA-E detectors offer Ethernet and WiFi connectivity as standard features. The detector can be added to a corporate network, allowing WiFi enabled tablet devices and laptops installed with Xtralis configuration software to connect wirelessly to the detector via the network.

Installation, Commissioning and Maintenance

The VEA detector features a robust IP40-rated enclosure and is equipped with a powerful pump that provides up to 100m capillary tube length. It is fully supported by the Xtralis VSC software which facilitates ease of system commissioning and maintenance. During commissioning, the normalization process establishes the flow performance parameters. A local smoke test port can be used to verify that the system is fully operational. Field replaceable filter, detection chamber, pump and valve components result in less down time and ease of maintenance.

How it Works

The VEA detector draws a combined air sample from a network of microbore flexible tubing from all sectors in the protected area, then filters and analyzes the sample in a laser detection chamber. When smoke particles are detected and the smoke level reaches set sensitivity levels, the system will raise appropriate alarm conditions. After a Fire 1 alarm is raised, the system will sequentially scan the sampling locations via the rotary valve to identify one or more sampling locations with the fire alarm event.

The VEA uses a linear vacuum pump which provides superior detection times over long tube lengths. The system monitors the airflow within the installation, allowing detection of breakages or blockages of individual sampling tubes, with faults indicated on the display and to monitoring equipment.

Alarms and fire location can be signaled via relays and VESDAnet. Ethernet and WiFi can be used for configuration and secondary monitoring, and a USB interface is provided for field installation and maintenance.

A series of LEDs display Alarm, Trouble, Disable and detector power on status. A button allows the user to Reset, or Disable the detector. Additionally, the VEA-040-A10 features a 3.5" LCD display which shows level and a smoke level bar graph, alarm thresholds, fault status, normalization status and filter life used.

ORDERING INFORMATION

VEA-040-A00	VESDA-E VEA-40 Aspirating Smoke Detector with LEDs
VEA-040-A10	VESDA-E VEA-40 Aspirating Smoke Detector with 3.5" Display
VER-A40-40-STX	VESDA-E VEA 40-Relay Local StaX

SPARE PARTS

VSP-972	VESDA-E VEA Filter
VSP-977	VESDA-E VEA Filter 10 pack

TECHNICAL SPECIFICATIONS

Supply Voltage	18 to 30Vdc	
Power Consumption @ 24Vdc	VEA-040-A00	VEA-040-A10
Quiescent	27W	27W
	1.12A	1.12A
Alarm Average	27W	27W
	1.12A	1.12A
Peak Current (Scan Mode)	3.5A	
Aspirator	Linear Vacuum Pump	
Dimensions	352mm W x 336mm H x 135.5mm D	
Weight	9.9kg	10kg
Operating Conditions	Ambient: 0°C to 39°C Sampled Air: 0°C to 50°C Tested to: 0°C to 49°C Humidity: 5% to 95% RH, non-condensing	
Microbore Tube Size	Normal Diameter: OD 6mm, ID 4mm Reduced Diameter: OD 4mm, ID 2.5mm	
Microbore Tube Length	Normal Diameter: Up to 100m per tube Reduced Diameter: Up to 15m per tube	
Flow Monitoring	Single sampling point and single tube blockage and breakage detection at set intervals	
Relays	7 programmable relays (latch or non-latch states) Contacts rated 2A @ 30Vdc (resistive)	
IP Rating	IP40	
Cable Access	4 x 25mm cable entries	
Cable Termination	Screw Terminal blocks 0.2-2.5 sq mm (24-14 AWG)	
Pre-alarms	Alert and Action – two pre alarm levels	
Sensitivity Range	0.20%/m – 16%/m	
Fire-1 Alarm Threshold at the Sampling Hole	High: 1.6%/m Enhanced: 4.0%/m Standard: 8.0%/m	
Communication Interfaces	USB 2.0, Ethernet (RJ45), WiFi (802.11 b/g/n)	
Software Features	Event log: Up to 20,000 events stored in FIFO format, smoke level, user actions, alarms and faults with time and date stamp	

APPROVALS

- ✓ ActivFire certified - Listing No. afp-3196
- ✓ UL
- ✓ ULC