FIRESUPPRESSION LTD
VESDA, FIRE DETECTION & FIRE SUPPRESSION

VESDA-VEA

PRODUCT OVERVIEW

The VESDA-E VEA series of aspirating smoke detectors combines proven VESDA reliability with advanced early warning smoke detection and pinpoint addressability. Using patented air-sampling technology and multi-channel microbore tubing, the system delivers highly sensitive, location-specific fire detection across multiple sampling points.
Designed for environments where identifying the exact source of a fire is critical, VEA detectors enable faster response times, improved safety, and reduced operational disruption.

BENEFITS

Pinpoint addressable smoke detection
Up to 40 addressable microbore sampling tubes
Blockage and tube break detection
Automatic sampling point cleaning
Adjustable sensitivity settings per sampling point
Variable capillary tube lengths up to 100 m
Laser-based smoke detection technology
Coarse particle filtering and optics protection
Reliable linear pump system
LED alarm and fault indicators
Seven programmable relays

APPLICATIONS

Healthcare environments benefit from rapid, location-specific detection in patient rooms, theatres, and critical care areas while minimising nuisance alarms. Education facilities gain high-sensitivity, addressable coverage across classrooms and accommodation spaces.
Commercial offices and retail environments are suited to both open-plan and segmented areas, supporting accurate fire location. Correctional facilities enable discreet monitoring of individual cells, reducing operational disruption.
Data centres and electrical cabinets benefit from pinpoint detection within racks and enclosures for early intervention.

Ethernet Connectivity
Built-in Ethernet enables seamless integration with corporate networks and fire system management platforms. When paired with Xtralis monitoring and configuration software, this allows:

VESDAnet™ Communication
VESDA devices communicate via VESDAnet, a robust bi-directional network designed for reliability and redundancy.
Key benefits include:
Continued operation during single-point wiring failures
Centralised monitoring and maintenance
Remote configuration and control

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Specifications

Supply Voltage	18-30 VDC	
Power Consumption @ 24VDC	**VEA-040-A00**	**VEA-040-A10**
Quiescent	27 W	27 W
Alarm Average	27 W	27 W
Peak current (scan mode)	3.5A	
Aspirator	Linear Vacuum Pump	
Dimensions (WHD)	352 mm x 336 mm x 135.5 mm (13.9 in x 13.2 in x 5.33 in)	
Weight	9.9 kg (21.8 lbs)	10 kg (22.2 lbs)
Operating Conditions	Ambient: 0°C to 38°C (32°F to 100°F) Sampled Air: 0°C to 50°C (32°F to 122°F)* Humidity: 5% to 95% RH, non-condensing ** Sampled Air temperature shall reach Ambient Detector temperature upon entry into Detector. Refer to Xtralis Design Guides & Application Notes for sampled air pre-conditioning.*	
Microbore Tube Size	Normal Diameter: OD 6 mm, ID 4 mm Reduced Diameter: OD 4 mm, ID 2.5 mm	
Microbore Tube Length	Normal Diameter: Up to 100m (328 ft) per tube Reduced Diameter: Up to 15 m (49 ft) 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 2 A @ 30 VDC (Resistive)	
IP Rating	IP40	
Cable Access	4 x 25 mm (1") 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	
Fire-1 Alarm Thresholds at the Sampling Hole	High: 1.6 % obs/m (0.5 % obs/ft) Enhanced: 4.0 % obs/m (1.23 % obs/ft) Standard: 8.0 % obs/m (2.5 % obs/ft)	
Communication Interfaces	USB 2.0, Ethernet (RJ45)	
Software Features	Event log: Up to 20.000 events. Smoke level, user actions, alarms and faults with time and date stamp	

Ordering Information

Ordering Code	Description
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

Refer to VEA Sampling Points data sheet (document # 29730) for more information regarding the sampling points.

Spare Parts

Ordering Code	Description
VSP-970	VESDA-E VEA-40 Mounting Bracket
VSP-971	VESDA-E VEA-40 Smoke Sensor Module
VSP-972	VESDA-E VEA Filter
VSP-973	VESDA-E VEA Pump
VSP-974	VESDA-E VEA Rotary Valve
VSP-975	VESDA-E VEA-040-A00 Fascia with LEDs
VSP-976	VESDA-E VEA-040-A10 Fascia with 3.5" Display
VSP-1006	VESDA-E VEA Volumetric Chamber

Approvals Compliance

Please refer to the Product Guide for details regarding compliant design, installation and commissioning.