FIRESUPPRESSION LTD
VESDA, FIRE DETECTION & FIRE SUPPRESSION

VESDA-E VEP

PRODUCT OVERVIEW

The VESDA-E VEP series is engineered to deliver ultra-early smoke detection with industry-leading resistance to false alarms. Designed for mission-critical and sensitive environments, the VEP combines next-generation sensing technology with proven aspirating smoke detection principles to ensure fast, reliable fire detection across a wide range of applications. Absolute calibration ensures stable sensitivity throughout the detector's operational life, eliminating performance drift over time.

BENEFITS

The VEP detector incorporates a high-capacity aspirator, enabling extensive aspirating pipe networks without compromising performance. Single-pipe models support up to 130 metres (427 ft) of sampling pipe, while four-pipe variants can accommodate networks up to 560 metres (1,837 ft).

The VESDA-E VEP series is engineered to deliver ultra-early smoke detection with industry-leading resistance to false alarms and is designed for long-term stability and precision

APPLICATIONS

Critical Infrastructure & Facilities
Ideal for server rooms, data centers, and control rooms where early and reliable fire detection is essential to prevent costly downtime.

High-Risk Areas
Provides advanced protection for UPS rooms and electrical rooms with high electrical loads, where fire risks are elevated.

Large Open Spaces
Well-suited for warehouses and industrial environments, offering wide-area coverage and dependable detection performance.

Difficult-to-Access Areas
Perfect for high-ceiling spaces or areas with strong airflow, reducing the need for frequent maintenance access.

Robust VESDAnet™ Communications
All VESDA-E devices communicate over the VESDAnet network, providing secure, bi-directional communication with built-in redundancy. The network architecture supports continued operation even if a single wiring fault occurs and enables centralised alarm reporting, configuration, diagnostics, and system management across multiple detectors.

Seamless Integration with Existing VESDA Systems
The VESDA-E VEP is fully backward compatible with existing VESDA installations. It shares the same mounting footprint, pipe connections, conduit entry points, and electrical interfaces as earlier VESDA VLP detectors. Compatibility with existing VESDAnet infrastructure allows both legacy and VESDA-E devices to be monitored and managed together using the latest VSC and VSM4 software platforms.

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VESDA-E VEP

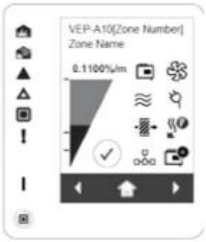
Specifications

	One Pipe VEP	Four Pipe VEP			
Supply Voltage	18-30 VDC (24 V Nominal)				
Power Consumption @ 24VDC	**VEP-A00-1P**	**VEP-A00-P**		**VEP-A10-P**	
Aspirator Setting	Fixed	1	5	1	5
Power (Quiescent)	8.8 W	7.0 W	9.0 W	8.0 W	10.0 W
Power (In Alarm)	9.6 W	7.8 W	9.8 W	8.8 W	10.8 W
Dimensions (WHD)	350 mm x 225 mm x 135 mm (13.8 in x 8.9 in x 5.3 in)				
Weight	4.4 kg (9.7 lbs)	4.4 kg (9.7 lbs)		4.5 kg (9.9 lbs)	
Operating Conditions	Ambient: 0°C to 38°C (32°F to 100°F) Sampled Air: -20°C to 60°C (-4°F to 140°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.*				
Area Coverage	1,000 m² (10,760 sq. ft)	2,000 m² (21,520 sq. ft)			
Min. airflow per pipe	15 l/m				
Pipe Length (Linear)	100 m (328 ft)	280 m (919 ft)			
Pipe Length (Branched)	130 m (427 ft)	560 m (1,837 ft)			
Pipe lengths depending on number of pipes in use	1 Pipe	1 Pipe	2 Pipe	3 Pipe	4 Pipe
	100 m (328 ft)	110 m (361 ft)	100 m (328 ft)	80 m (262 ft)	70 m (230 ft)
StaX	PSU				
No. of holes (A/B/C)	30/40/45	40/80/100			
Computer design tool	ASPIRE				
Pipe	Inlet: External diameter 25 mm or 1.05 in (3/4 in IPS) Exhaust: External diameter 25 mm or 1.05 in (3/4 in IPS) via adaptor				
Relays	7 programmable relays (latching or non-latching states) Contacts rated 2 A @ 30 VDC (Resistive)				
IP rating	IP40				
Cable access	4 x 26 mm (1.02 in) cable entries				
Cable termination	Screw Terminal blocks 0.2–2.5 sq mm (24–14 AWG)				
Measurement Range	0.000 to 32% obs/m (0.0000 to 11.09% obs/ft)				
Sensitivity Range	0.005 to 20% obs/m (0.0015% to 6.575% obs/ft)				
Threshold setting range	Alert: 0.005% to 2.0% obs/m (0.0015% to 0.614% obs/ft) Action: 0.005% to 2.0% obs/m (0.0015% to 0.614% obs/ft) Fire1: 0.010% to 2.0% obs/m (0.0030% to 0.614% obs/ft) Fire2: 0.020% to 20.0% obs/m (0.0061% to 6.575% obs/ft)				
Software features	Event log: Up to 20,000 events Smoke level, user actions, alarms and faults with time and date stamp AutoLearn: Detector learns Alarm Thresholds and Flow Fault thresholds by monitoring the environment.				

Spare Parts

VSP-956	VESDA-E Flow Sensor Manifold	**VSP-964-03**	VESDA-E Smoke Detection Chamber - MK3
VSP-956-04*	VESDA-E Flow Sensor Manifold	**VSP-964-04 ***	VESDA-E Smoke Detection Chamber - MK4
VSP-960	VESDA-E Mounting Bracket	**VSP-965**	VESDA-E Sampling Module
VSP-961	VESDA-E Exhaust adaptor US	**VSP-968**	VESDA-E VEP-A00-P/1P Front Cover - Plastic - LEDs
VSP-962	VESDA-E Filter	**VSP-969**	VESDA-E VEP-A10-P Front Cover - Plastic - LCD - 3.5" Display
VSP-962-20	VESDA-E Filter - 20 Pieces	**VSP-969-04 ***	VESDA-E VEP-A10-P Front Cover - Plastic - LCD - 3.5" Display
VSP-963	VESDA-E Aspirator		

3.5" Display



LED	Description
	Fire 2
	Fire 1
	Action
	Alert
	Disabled
	Fault
	Power

Home Page

Icon on Display	Description
	Smoke and Alarm Threshold Levels
	Detector OK
	Detector Fault
	Aspirator Fault
	Airflow Fault
	Power Fault
	Filter Fault
	Smoke Chamber Fault
	VESDAnet Fault
	StaX Module Fault

Ordering Information

Ordering Code	Description
VEP-A00-1P	VESDA-E VEP with LEDs, 1 pipe, Plastic Enclosure
VEP-A00-P	VESDA-E VEP with LEDs, 4 pipe, Plastic Enclosure
VEP-A10-P	VESDA-E VEP with 3.5" Display, 4 pipe, Plastic Enclosure

Approvals Compliance

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