# **VESDA-E VEP**

## **VEP-A00-P & VEP-A10-P**



The VESDA-E VEP series of smoke detectors bring the latest and most advanced detection technology to provide very early warning and the best nuisance alarm rejection to a wide range of applications. Built on the Flair detection technology and years of application experience, VEP detectors deliver absolute calibration for lifetime performance and a range of revolutionary new features that deliver user value.

#### Flair Detection Technology

Flair is the revolutionary new detection chamber that forms the core of VESDA-E VEP, providing better detection, fewer nuisance alarms, higher stability, increased longevity and particle characterisation. Direct imaging of the sampled particles using a CMOS imager combined with multiple photo-diodes allow vastly more data that can be used to derive actionable information about the observed particles using analytics.

#### Installation, Commissioning and Operation

VESDA-E VEP is equipped with a powerful aspirator that provides a total pipe length of 560 m (1,837 ft). Out of box operation is made possible with AutoConfig which allows airflow normalisation and AutoLearn Smoke and Flow to be initiated from within the detector. VEP is fully supported by the ASPIRE-E and Xtralis VSC software applications which facilitate ease of pipe network design, system commissioning and maintenance.

#### VESDAnet™

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

#### **Ethernet and WiFi connectivity**

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 PC's installed with Xtralis monitoring and configuration software to connect wirelessly to the detector via the network.

#### **Backward Compatibility**

VESDA-E VEP is fully compatible with existing VESDA installations. The detector occupies the same mounting footprint, pipe, conduit and electrical connector positioning as VESDA VLP. VEP is also compatible with existing VESDAnet installations allowing monitoring of both VESDA-E and legacy detectors via the latest iVESDA application.

#### **Features**

- Flair detection technology delivers reliable very early warning in a wide range of environments with minimal nuisance alarms
- Multi stage filtration and optical protection with clean air barriers ensures lifetime detection performance
- Four alarm levels and a wide sensitivity range deliver optimum protection for the widest range of applications
- Intuitive LCD icon display provides instant status information for immediate response
- Flow fault thresholds per port accommodate varying airflow conditions
- Smart on-board filter retains dust count and remaining filter life for predictable maintenance
- Extensive event log (20,000 events) for event analysis and system diagnostics
- AutoLearn<sup>™</sup> smoke and flow for reliable and rapid commissioning
- Referencing to accommodate external environmental conditions to minimise nuisance alarms
- Fully backward compatible with VLP and VESDAnet
- Remote monitoring with iVESDA for system review and proactive maintenance
- Ethernet for connectivity with Xtralis software for configuration, monitoring and maintenance
- Industry first ASD monitoring and maintenance via WiFi
- USB for PC configuration, and firmware upgrade using a memory stick
- Two programmable GPIs (1 monitored) for flexible remote control
- Field replaceable sub-assemblies faster service and maximum uptime

#### **Listings / Approvals**

- UL
- ULC
- FM
- ActivFire
- CE
- VdS
- EN 54-20, ISO 7240-20
  - Class A (40 holes / Fire 1 = 0.028% obs/m)
  - Class B (80 holes / Fire 1 = 0.027% obs/m)
  - Class C (100 holes / Fire 1 = 0.072% obs/m) Classification of any configuration is determined using ASPIRE-E.

Regional approvals listings and regulatory compliance vary between product models. Refer to www.xtralis.com for the latest product approvals matrix.



## **Specifications**

Supply voltage	18-30 VDC (24 V Nominal)			
Power consumption @ 24 VDC	VEP-A00-P		VEP-A10-P	
Aspirator Setting	1	5	1	5
Power (Quiescent)	7.0 W	8.8 W	8.2 W	10.0 W
Power (In Alarm)	7.8 W	9.6 W	10.4 W	11.6 W
Dimensions (WHD):	350 mm x 225 mm x 135 mm (13.8 in x 8.9 in x 5.3 in)			
Weight	4.0 kg (8.8 lb) 4.1 kg (9.1 lb)			
Operating conditions	Ambient: 0°C to 39°C (32°F to 102°F) Sampled Air: -20°C to 60°C (-4°F to 140°F) Tested to: -20°C to 55°C (-4°F to 131°F) Humidity: 10% to 95% RH, non-condensing			
Area Coverage	2,000 m <sup>2</sup> (21,500 sq. ft)			
Min. airflow per pipe	15 l/m			
Pipe Length (Linear)	280 m (919 ft)			
Pipe Length (Branched)	560 m (1,837 ft)			
Analytics	DieselTrace™, DustTrace™, WireTrace™			
StaX	PSU, Auto Pipe Clean			
No. of holes (A/B/C)	40/80/100			
Computer design tool	ASPIRE-E™			
Pipe	Inlet: External diameter 25 mm or 1.05 in (3/4 in IPS)			
	Exhaust: Exter adaptor	nal diameter 25	mm or 1.05 in	(3/4 in IPS via
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)			
Dynamic Range	0.0002% to 20% obs/m (0.00006% to 6.25% obs/ft)			
Sensitivity Range	0.005 to 20.00% obs/m (0.0016% to 6.25% obs/ft)			
Threshold setting range	Alert: 0.005% to 2.0% obs/m (0.0016% to 0.625% obs/ft) Action: 0.005% to 2.0% obs/m (0.0016% to 0.625% obs/ft) Fire1: 0.010% to 2.0% obs/m (0.0031% to 0.625% obs/ft) Fire2: 0.020% to 20.0% obs/m (0.0063% to 6.25% obs/ft)			
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 AutoLearn: Min 15 minutes, Max 15 days. Recommended minimum 1 day. While AutoLearn is in progress, thresholds are NOT changed from pre-set values.			

## **Spare Parts**



Mounting Bracket	VSP-960	
VESDA-E Exhaust adaptor US	VSP-961	
VESDA-E Filter	VSP-962	
VESDA-E Filter - 20 Pieces	VSP-962-20	
VESDA-E Aspirator	VSP-963	
VESDA-E Smoke Detection Chamber	VSP-964	
VESDA-E Sampling Module	VSP-965	

## 3.5" Display



Symbol	LED
<b>^</b>	Fire 2
ê	Fire 1
	Action
Δ	Alert
	Disabled
Ţ	Fault
I	Power
	Smoke and Alarm Threshold Levels
$\bigcirc$	Detector OK
	Detector Fault
\$	Aspirator Fault
≋	Airflow Fault
ර්	Power Fault
- <u>Z</u> +	Filter Fault
<u></u> %©	Smoke Chamber Fault
品	VESDAnet Fault
	StaX Module Fault
	Home
<b> </b>	Previous/Next Screen Pipes and Airflow Status Filter and AutoConfig Status

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