

VESDA-E VEU WITH ESSERBUS® TRANSPONDER

VEU-A00-EBTI, VEU-A10-EBTI



The VESDA-E VEU series of aspirating smoke detectors is the premium detector of the VESDA-E range, and now the integrated model (VEU-EBTI) has the ability to directly work with esserbus® and esserbus®-PLus through the built-in transponder which allows the connection into the Esser range of fire alarm control panels. It is compatible with the FlexES Control panel with the pre-alarm feature supported. It is also compatible with IQ8Control and Compact panels but without the pre-alarm feature. An Ultra-wide sensitivity range; 15 times greater than VESDA VLP, and provision for more sampling holes provide an increased coverage in high airflow applications by at least 40 %. Considerably longer linear pipe runs and extended branched pipe network configurations cater perfectly to applications with higher ceilings providing an increased coverage by up to 80 % whilst allowing convenient detector mounting for ease of service and maintenance. A range of revolutionary new features provide unsurpassed detection performance, flexibility, field programmability, connectivity and reduced total cost of ownership.



Flair Detection Technology

Flair is the revolutionary detection chamber that forms the core of the VESDA-E VEU, providing higher stability and increased longevity. Direct imaging of the sampled particles using a CMOS imager combined with multiple photo-diodes allows better detection and fewer nuisance alarms.

Installation, Commissioning and Operation

VESDA-E VEU features a robust IP 40-rated enclosure and is equipped with a powerful aspirator that provides a total pipe length of 800 m. 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. VEU is fully supported by the ASPIRE and Xtralis VSC software applications which facilitate ease of pipe network design, system commissioning and maintenance. In addition, the application-specific project planning of the esserbus® transponder is supported via the tools 8000 programming software in order to guarantee quick and trouble-free start-up of the fire alarm system.

VESDAnet™

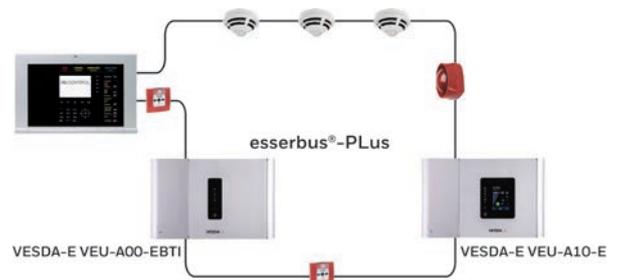
VESDA devices communicate on VESDAnet which provides a robust bi-directional communication network allowing continued redundant operation even during single point wiring failures. VESDAnet enables primary reporting, centralized configuration, control, maintenance and monitoring. Furthermore, the latest iVESDA application can be used for monitoring devices on VESDAnet.

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 laptops installed with Xtralis configuration software to connect wirelessly to the detector via the network.

Loop Connectivity

The VEU-EBTI is connected directly on the esserbus®. All devices are member of the esserbus® loop and will be easily programmed with the commissioning software tools 8000.



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 an ultra 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™ smoke and flow for reliable and rapid commissioning
- Referencing to accommodate external environmental conditions to minimise nuisance alarms
- Remote monitoring with iVESDA for system review and proactive maintenance
- Ethernet for connectivity with Xtralis software for configuration, secondary monitoring and maintenance
- Industry first. Aspirating detector secondary monitoring and maintenance via WiFi
- USB for PC configuration, and firmware upgrade using a memory stick
- Two pre-configured GPI's; 1 unmonitored for Remote Reset function through the panel, and 1 monitored for normal detector operation (inaccessible to the user)

- Field replaceable sub-assemblies enable faster service and maximum uptime
- Direct connection to the esserbus® loop technology of Esser fire alarm control panels without the need for extra equipment or loop modules
- Integrated loop isolator
- Evaluation of faults of the VESDA-E detector
- Evaluation of pre-alarms of the VESDA-E detector in combination with FlexeS Control
- Signal evaluation and loop monitoring in compliance with EN 54-13
- Optional low voltage monitoring of the external power supply
- Three spare inputs to add e.g. detailed PSU fault warnings like battery fault, earth fault, mains fault to the system
- Programmable reset functionality for the detector
- Secure start-up via tools 8000
- Individual programming via tools 8000

Listings / Approvals

- VdS
- CE
- EN 54-17
- EN 54-18
- EN 54-20
- Class A (80 holes / Fire 1 = 0.015% obs/m)
- Class B (80 holes / Fire 1 = 0.026% obs/m)
- Class C (100 holes / Fire 1 = 0.062% obs/m)

Classification of any configuration is determined using ASPIRE.

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

VESDA-E VEU WITH ESSERBUS® TRANSPONDER

TECHNICAL SPECIFICATIONS



Specifications

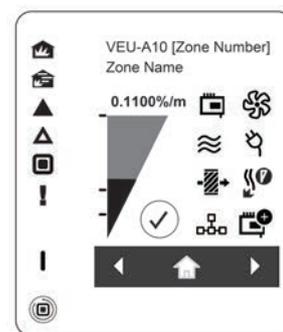
Supply Voltage	18-28 V DC (24 V Nominal)					
Maximum Power @ 28 V DC	Quiescent			In Alarm – Four Transponder Zone Connection - Maximum		
	16.2 W			19.2 W		
Power Consumption @ 24 V DC	VEU-A00-EBTI			VEU-A10-EBTI		
Aspirator Setting	1	5	10	1	5	10
Power (Quiescent)	7.3 W	9.1 W	15.0 W	8.5 W	10.3 W	16.1 W
Power (In Alarm - One Transponder Zone Connection - Standard)	8.6 W	10.4 W	16.3 W	11.2 W	12.4 W	17.4 W
Power (In Alarm - Four Transponder Zone Connection - Maximum)	10.0 W	11.8 W	17.7 W	12.6 W	13.8 W	18.8 W
Dimensions (WxHxD)	350 mm x 225 mm x 135 mm					
Weight	5.37 kg			5.37 kg		
Operating Conditions	Ambient: 0°C to 39°C Sampled Air: -20°C to 60°C Tested to: -10°C to 50°C Humidity: 5% to 95% RH, non-condensing					
Maximum area of coverage	6,500 m ² *					
Minimum airflow per pipe	15 l/m					
Pipe lengths depending on number of pipes in use	1 Pipe	2 Pipes	3 Pipes	4 pipes		
	160 m	150 m	130 m	100 m		
Maximum pipe lengths	Total Pipe Length (with branches): 800 m					
StaX	PSU, Auto Pipe Clean					
No. of holes (A/B/C)	80/80/100					
Computer design tool	ASPIRE					
Pipe	Inlet: External diameter 25 mm Exhaust: External diameter 25 mm					
Relays	7 pre-configured relays (latching or non-latching states) - inaccessible to the end user.					
IP rating	IP 40					
Connection to the Fire Alarm Control Panel	Direct connection to the esserbus® loop through recommended wiring					
Cable access	4 x 26 mm cable entries					
Cable termination	Screw Terminal blocks 0.2 - 2.5 mm ² (24 - 14 AWG)					
Dynamic Range	0.0000% - 32% obs/m					
Sensitivity Range	0.001% - 20.0% obs/m					
Threshold setting range	Alert: 0.001% - 2.0% obs/m Action: 0.001% - 2.0% obs/m Fire1: 0.001% - 2.0% obs/m Fire2: 0.001% - 20.0% obs/m					
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.					

* System design and regulatory requirements may restrict the monitoring area to a lesser amount.

Spare Parts

VSP-960	VESDA-E Mounting Bracket	VSP-964	VESDA-E Smoke Detection Chamber
VSP-961	VESDA-E Exhaust adaptor US	VSP-964-03	VESDA-E Smoke Detection Chamber – MK3
VSP-962	VESDA-E Filter	VSP-965	VESDA-E Sampling Module
VSP-962-20	VESDA-E Filter - 20 pieces	VSP-966	VESDA-E VEU-A00 Front Cover
VSP-963	VESDA-E Aspirator	VSP-967	VESDA-E VEU-A10 Front Cover

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
VEU-A00-EBTI	VESDA-E VEU with LEDs with ESSERBUS TI
VEU-A10-EBTI	VESDA-E VEU with 3.5" Display with ESSERBUS TI

Approvals Compliance

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