

#### FEATURES

- ✓ Intelligent VESDA-E series connects to the AFP-3030 on the loop
- ✓ Runs in FlashScan® mode
- ✓ Pinpoint addressability with end-to-end system integrity monitoring
- ✓ 40 addressable microbore tubes with individual sampling points
- ✓ Interruption-free business operation with centralized testing and maintenance
- ✓ Sampling point and tube blockage detection
- ✓ Automatic tube breakage and sampling point presence detection and sampling point cleaning at set intervals
- ✓ Three sensitivity settings for the sampling points
- ✓ Variable length microbore tubes, up to 100m
- ✓ Laser-based absolute smoke detection
- ✓ Coarse particle filtering and clean air barrier for optics protection
- ✓ Reliable linear pump technology
- ✓ LEDs for alarm and fault signaling
- ✓ 3.5" color touchscreen for status review
- ✓ Seven pre-configured relays
- ✓ Two GPIs (monitored/unmonitored) with fix mapping to detector
- ✓ Reset function
- ✓ iVESDA application for system monitoring on mobile devices
- ✓ Field replaceable filter, smoke sensor module, pump and rotary valve
- ✓ Easy cable termination access
- ✓ Event Log (20,000 events)



#### PRODUCT DESCRIPTION

Intelligent VESDA-E VEA series of detectors provide point-addressable early warning smoke detection with pinpoint addressability. These detectors use microbore air-sampling tubes and patented air sampling points with three alarm sensitivity settings for the sampling points. Intelligent VEA supports 40 sampling points on a single central detector. With a wide range of features the Intelligent VEA provides flexibility, field programmability, enhanced connectivity and reduced total cost of ownership.

VESDA-E VEA Series detector connects to the SLC loop of compatible intelligent fire alarm control panels using FlashScan® protocol to communicate up to five levels of events for display and use in control-by-event system programming. It also provides individual sampling point events directly on the fire alarm control panel. Using the SLC connection, the system operator can also review real-time status information, such as alarms and faults. The system operator can also put an Intelligent VEA Series detector into service mode, or reset airflow baselines.

The VEA detector features a robust IP40-rated enclosure and is equipped with a powerful pump that provides individual microbore tube lengths up to 100m. It is fully supported by the Xtralis VSC/VSM software which facilitates ease of system commissioning and maintenance. During commissioning, the normalization process establishes the flow performance parameters. Local smoke test ports are used during servicing to verify that the system is fully operational. Field replaceable filter, smoke sensor module, pump and rotary valve components result in less down time and ease of maintenance.

The LCD display provides a range of status information including alarm and fault conditions as well as smoke level. Screens for each type of information are available using a simple navigation system.

Intelligent VEA Series detectors support three sensitivity settings with four alarm levels. Day/Night/Weekend mode enables technicians to configure alarm thresholds based on routine changes in the environment.

### **Connectivity and Configuration**

VESDA-E detectors offer Ethernet and WiFi connectivity as standard features. The detector can be added to a corporate network, allowing WiFi enabled mobile devices and PC's installed with Xtralis configuration and monitoring applications (VSC/VSM/iVESDA) to connect wirelessly to the detector via the network.

### **How it Works**

The VEA detector draws a combined air sample from a network of up to 40 microbore flexible tubing from all sampling points in the protected area, then filters and analyzes the sample in laser detection chambers in the smoke sensor module. When smoke particles are detected and the smoke level reaches set alarm thresholds, the system will raise appropriate alarm conditions. After a Fire Alarm (Fire 1) 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. To assist in investigation of the source of a fire, if the system is in Pre-Alarm, the user can initiate a smoke scan of all sampling locations.

The VEA pump provides superior detection times for long tube lengths. The system monitors the airflow within the installation, allowing detection of breakages or blockages of individual sampling points and sampling tubes, with faults indicated on the fire alarm control panel. Alarms and fire location are signaled to the fire panel via the SLC loop. Ethernet and WiFi can be used for configuration and secondary monitoring, and a USB interface is provided for field installation and maintenance.

### **FLASHSCAN CAPABILITIES**

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- ✓ VEA-040-A00-NTF and VEA-040-A10-NTF connect to the Signaling Line Circuit (SLC) loop of the AFP-3030. For these detectors, panel firmware version 20 or higher is required.
- ✓ Uses 45 detector SLC addresses. *Sensitivity settings for all event thresholds are programmed with the VSC or VSM applications.*
- ✓ Detector trouble reporting at panel

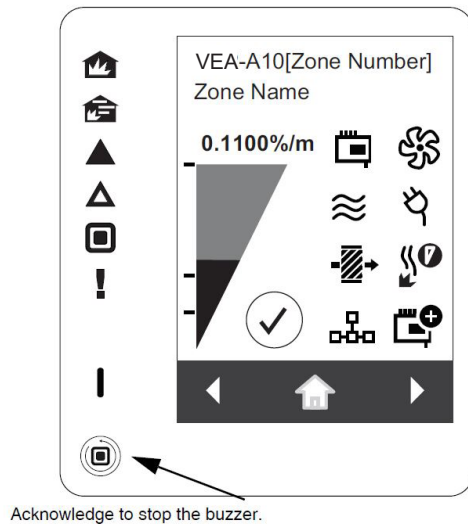
**TECHNICAL SPECIFICATIONS**

Supply voltage	18-30Vdc (24V Nominal)	
Detector current consumption @ 24Vdc	<b>VEA-040-A00-NTF</b>	<b>VEA-040-A10-NTF</b>
Normal operation	1.12A	1.12A
In alarm	1.12A	1.12A
Peak current (scan mode)	3.5A	3.5A
SLC current consumption		
Normal Operation	8mA	8mA
In Alarm	30mA	30mA
Aspirator	Linear Vacuum Pump	
Dimensions	352mm W x 336mm H x 135.5mm D	
Weight	9.9kg	
Operating Conditions	<b>Ambient:</b> 0°C to 39°C <b>Sampled Air:</b> 0°C to 50°C <b>Humidity:</b> 5% to 95% RH, non-condensing	
Microbore Tube Size	<b>Normal Diameter:</b> OD 6mm, ID 4mm <b>Reduced Diameter:</b> OD4 mm, ID 2.5mm	
Microbore Tube Length	<b>Normal Diameter:</b> Up to 100m per tube <b>Reduced Diameter:</b> Up to 15m per tube	
Flow Monitoring	Single sampling point and single tube blockage and breakage detection with scanning at set intervals	
Relays	7 pre-configured relays. 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	
Fire-1 Alarm Thresholds at the Sampling Point	<b>High:</b> 1.6%/m <b>Enhanced:</b> 4.0%/m <b>Standard:</b> 8.0%/m	
Communication Interfaces	USB 2.0, Ethernet (RJ45), WiFi (802.11 b/g/n)	
Software Features	<b>Event log:</b> Up to 20,000 events. Smoke level, user actions, alarms and faults with time and date stamp	

**ORDERING INFORMATION**

<b>VEA-040-A00-NTF</b>	VESDA-E Addressable VEA with LED display
<b>VEA-040-A10-NTF</b>	VESDA-E Addressable VEA with 3.5" Display

#### USER INTERFACE DISPLAY



#### APPROVALS

The listings and approvals below apply to Intelligent VESDA-E VEA components. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process.

- ✓ ActivFire certified - Listing No. afp-3196
- ✓ UL/ULC Listed: S5198 Vol 20.
- ✓ CSFM: 7259-1728-0502.

Symbol	LED
	Fire 2
	Fire 1
	Action
	Alert
	Disabled
	Fault
	Power
	Smoke and Alarm Threshold Levels
	Detector OK
	Detector Fault
	Aspirator Fault
	Airflow Fault
	Power Fault
	Filter Fault
	Smoke Chamber Fault
	Communication Fault
	StaX Module Fault