# VESDA-E Pocket Guide

## SMOKE+
A new benchmark for detection performance, detection reliability, consistent performance over time and efficiency of operation

**Detection Performance**
- Vastly better sensitivity
- Faster response time

**Detection Reliability**
- Minimizing nuisance alarms
- Unsurpassed detection stability under temperature

**Consistent Performance Over Time**
- Long term exposure to smoke
- Long term exposure to dust

**Efficiency of Operation**
- Power consumption per unit area

## FLEX
Future Proof expandability for maximum flexibility across a wide variety of applications

**PSU StaX**
- Power supply providing operating power including battery backup for VESDA-E detectors

**Auto Pipe Clean StaX**
- Automated Pipe Cleaning StaX improves performance and minimizes maintenance costs in dusty environments

## SECTOR ADDRESSABILITY
Sector (pipe) addressability coupled with the Flair technology provides the best in VEW more cost-effectively than the standard “4 detector” approach

**Sector (Pipe) Addressability**
- Enables a single fire zone to be divided into four (4) separate areas
- Allows users to locate the source of smoke more quickly due to smaller search area
- Provides real time detection by Sector to monitor fire growth
- Provides four individually configurable alarm levels (Alert, Action, Fire 1 and Fire 2) for each Sector allowing flexible application in different environments
- More cost effective than “4 detectors” for both installation and maintenance

## PINPOINT ADDRESSABILITY
Pinpoint tube addressability provides situational awareness to improve response time, efficiency and effectiveness

**Pinpoint Addressability**
- VESDA-E pinpoint addressability with flexible tubing (up to 40 holes)
- VESDA-E VEA is a multichannel addressable system which is able to divide a protected space into sampling locations, enabling the localization of a fire for faster incident response
- PSU StaX supports up to 200 VESDA-E devices on a single loop
- VESDA-E detectors provide up to 12 relays

## CONNECT
Flexible networking and programming capabilities that reduce maintenance and monitoring costs through extensive connectivity options and remote diagnostics

**Ethernet enables connectivity with Xtralis VSC & VSM4**

**Wi-Fi enables connectivity with hand-held Android & iOS devices**

**USB port allows direct PC connection as well as firmware upgrade**

**VESDAnet supports up to 200 VESDA-E devices on a single loop**

## TOTAL COST OF OWNERSHIP (TCO)
VESDA-E provides lifetime of value, reliability, and protection – with VESDA-E you can reduce the Total Cost of Ownership

**Delivering greater Capex value with higher sensitivity and longer pipe runs to reduce the total installation cost**

**Reduces Opex with longer pipe runs enabling convenient mounting, and field replaceable parts**

**Plug & Play installation improves the installation experience and reduces installation cost**

**Design-less pipe networks eliminate design for simple networks and provide direct time and cost saving**

**Backwards compatibility**
- Same footprint, pipe conduit pitch and relays order as VLP/VLS
- Acts as a gateway into existing VESDAnet

**Vast monitoring options**
- VSM4
- iVESDA
- Remotes
### PRODUCT COMPARISON

<table>
<thead>
<tr>
<th>Parameter</th>
<th>VESDA-E VEU</th>
<th>VESDA-E VEP</th>
<th>VESDA-E VES</th>
<th>VESDA-E VEP-1</th>
<th>VESDA-E VEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire 1 Lowest Threshold</td>
<td>0.001%/m (0.0003%/ft)</td>
<td>0.01%/m (0.0031%/ft)</td>
<td>0.01%/m (0.0031%/ft)</td>
<td>0.01%/m (0.0031%/ft)</td>
<td>Sampling hole sensitivity 1.6%/m (0.5%/ft)</td>
</tr>
<tr>
<td>Detection Range</td>
<td>0.001 - 20.0% obs/m (0.0003 - 6.25% obs/ft)</td>
<td>0.005 - 20% obs/m (0.0016% - 6.25% obs/ft)</td>
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<td>0.005 - 20% obs/m (0.0016% - 6.25% obs/ft)</td>
<td>0.020 - 16% obs/m (0.006 - 4.88% obs/ft)</td>
</tr>
<tr>
<td>EN54-20 Max. no of Holes (Class A / B / C)</td>
<td>80 / 80 / 100</td>
<td>40 / 80 / 100</td>
<td>40 / 80 / 100</td>
<td>30 / 40 / 45</td>
<td>40</td>
</tr>
<tr>
<td>Pipe Length (Linear)</td>
<td>400 m (1,312 ft)</td>
<td>280 m (919 ft)</td>
<td>280 m (919 ft)</td>
<td>100 m (328 ft)</td>
<td>40 x 100 m (40 x 328 ft)</td>
</tr>
<tr>
<td>Pipe Length (Branched)</td>
<td>800 m (2,624 ft)</td>
<td>560 m (1,837 ft)</td>
<td>560 m (1,837 ft)</td>
<td>130 m (427 ft)</td>
<td>NA</td>
</tr>
<tr>
<td>Flow Sensing</td>
<td>Ultrasonics</td>
<td>Ultrasonics</td>
<td>Ultrasonics</td>
<td>Ultrasonics</td>
<td>Pressure Transducer and Thermistor</td>
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<tr>
<td>Flow Thresholds</td>
<td>Per Pipe</td>
<td>Per Pipe</td>
<td>Per Pipe</td>
<td>Per Pipe</td>
<td>Per System</td>
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<tr>
<td>StaX Support</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Addressability</td>
<td>No</td>
<td>No</td>
<td>4 Sectors (pipes)</td>
<td>No</td>
<td>Up to 40 sampling holes</td>
</tr>
<tr>
<td>VESDAnet</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>iVESDA Support</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>Field Replaceable Chamber</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Wi-Fi, Ethernet, USB</td>
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<td>Yes</td>
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