Aspirating Smoke & Gas Detection

fire protection TECHNOLOGIES

GASEOUS SUPPRESSION · WATER SUPPRESSION · FOAM SUPPRESSION · EXPLOSION PROTECTION · **FIRE DETECTION** · MILITARY & DEFENCE · SPECIAL APPLICATIONS · SUPPORT SERVICES

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VESDA®

THE WORLD'S NO. 1 ASD BRAND

VESDA very early warning smoke detection solutions provide the earliest possible warning of an impending fire hazard. VESDA buys time to investigate an alarm and initiate an appropriate response to prevent injury, property damage or business disruption. And because VESDA has the industry's widest sensitivity range and multi-level alarms, even minute levels of smoke can be detected before a fire has time to escalate.

As the No. 1 ASD brand specified by fire professionals around the world, VESDA is synonymous with reliable, high-performance fire detection.

WHY VESDA?

VESDA works by continuously drawing air into distributed pipe network via a high-efficiency aspirator. The air sample then passes through a dual-stage filter. The first stage removes dust and dirt from the air sample before it enters the laser detection chamber. The second, ultra-fine stage provides an additional clean-air supply to keep the detector's optical surfaces free from contamination, ensuring consistent absolute detection and long detector life as well as minimizing nuisance alarms.

From the filter, the air sample goes through the detection chamber where it is exposed to a laser light source. When smoke is present, light is scattered within the detection chamber and is instantly identified by the highly sensitive receiver system. The signal is then processed and presented via a bar-graph display, alarm threshold indicators and/or graphic display. VESDA detectors are able to communicate this information to a fire alarm control panel, a software management system, or a building management system via relays or a High Level Interface (HLI).

VESDA-E VEU THE NEXT GENERATION

The VEU series of aspirating smoke detectors are the premium detector of the VESDA-E range. 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 up to 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.

Color touch screen display

The VEU-A10 detector features a 3.5" colour touch screen display which provides a range of status information including smoke level as well as trouble conditions. A simple navigation system allows the user to view all the status information.

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.

Backward Compatibility

VESDA-E detectors occupy the same mounting footprint, pipe, conduit and electrical connector positioning as VESDA VLP and VLS detectors hence providing complete backwards compatibility.

VESDA ECO & EX GAS DETECTOR
Gas Detection for Use with Aspirating Smoke Detection

VESDA ECO (Ex) provides the industries first combined aspirated smoke and gas detection system. Early warning of toxic, oxygen and flammable gas hazards to protect personnel and property whilst ensuring business continuity. VESDA ECO (Ex) is approved for use within Class I Division 2 classified hazardous locations.

Applications include:
• Battery charging rooms
• Boiler plant rooms
• Utility/ service tunnels
• Refrigerated stores and plant rooms
• Water treatment and sewerage plants
• Power generation plants
• Metal processing plants

HOW IT WORKS

VESDA ECO (Ex) uses an existing or new VESDA aspirating pipe network to actively monitor for gas escapes and build-ups.

Each VESDA ECO (Ex) gas detector can house up to two gas sensors, and additional detectors can be added easily to the VESDA pipe network to monitor more gases if required. Pre-calibrated sensor cartridges are easily replaced in the field and make converting to different gas sensors or replacing sensors a simple task.

VESDA ECO (Ex) provides significant installation and routine maintenance cost savings over conventional multi-point gas detection solutions, by reducing the number of detectors required to cover an area and by providing easy access for routine maintenance.

DETECTABLE GASES

- Hydrogen
- Methane
- Propane
- Gasoline Vapour
- Pentane
- Ammonia

- Alcohols
- Oxygen
- Hydrogen Sulphide
- Sulphur Dioxide
- Nitrogen Dioxide
- Chlorine
- Carbon Dioxide

VESDA ASPIRE2

The performance of an aspirating smoke detection made easy
The performance of an aspirating smoke detection system is dependent upon the design of the pipe network used to transport air back to the smoke detector.

FEATURES OF ASPIRE2

- Ensures optimum design of VESDA aspirating smoke detection pipe networks, including VESDA ECO gas detection and environmental monitoring
- Accurately models pipe network designs to environmental performance criteria
- Speeds the design process by automating adjustment of hole sizes
- Allows different detector performance requirements within one building
- 3D schematics to aid design and installation
- Professional reports and materials lists can be generated to add to client submissions
- FPT can provide the aspire design service for you

VSM4 - MANAGEMENT SOFTWARE

VSM4 provides full and comprehensive integration of your VESDA and ECO gas detection systems.

The Picture Tells the Story – in Real Time

At a glance VSM4's interface can show you:
- A color-coded real-time event list, prioritized according to urgency
- Graphical representations of smoke and gas levels
- Trending analysis so that you can compare smoke and gas levels across the system
- Exact details about the location, zone and devices involved in an event
- Smart, user-friendly operator controls that leave you in complete control

Powerful Configuration Capabilities in One Tool

VSM4 includes all the sophisticated network and device configuration capabilities of Xtralis VSC software. It also includes all of VSC's system commissioning and testing functionality. VSM4's offline configuration function allows you to create an off-line configuration at your convenience and later connect and configure the system when on-site.

VSM4 SET UP Fire Protection Teccnologies can provide a full set up and commissioning service, all you need to provide are " As installed drawings"

OUR COMMITMENT *"To provide our customers with the best possible service, the highest quality products and the right solution for your needs"*

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PRODUCTS:

Gaseous Suppression

Inert Gas (IG-01, IG-55, IG-100, IG-541)
Novec 1230™ Fluid (FK-5-1-12)
FM-200® / NAF S 227 (HFC-227ea.)
Ecaro 125® / NAF S 125 (HFC-125)
Carbon Dioxide (CO_2)
Hybrid Systems (N_2 / Water)
Pressure Relief Vents
Enclosure Integrity Testing Equipment
Pipe & Fittings

Water Suppression

Water Mist - High Pressure
Water Mist - Intermediate Pressure
Water Mist - Low Pressure
Hybrid Systems (Water / N_2)
Monitors & Delivery Systems
High Speed Deluge

Foam Suppression

Foam Concentrates
Foam Proportioning
Foam Delivery Systems
Foam Concentrate Testing

Explosion Protection

Explosion Suppression
Explosion Isolation
Explosion Vents & Pressure Relief
Spark Suppression
Explosibility Testing

Fire Detection

Linear Heat Detection - Digital
Linear Heat Detection - Fibre Optic
Linear Heat Detection - Micro Chip
Flame Detection
Video Imaging Detection
Spark Detection
Control & Indicating Equipment
Thermal Imaging Detection
Aspirating Smoke Detection

Military & Defence

Military Vehicles
Naval Vessels

Special Applications

Micro Environment
Oxygen Reduction
Kitchen Protection Systems
Dry Chemical
Vehicle Systems
Compressed Air Foam
Marine & Offshore
Vapour Mitigation

Support Services

Design / Engineering
Technical Support
Services & Testing

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TECHNOLOGIES

'Every solution for your special hazard needs'