VESDA®

Aspirating Smoke Detection for Small, Business-critical Spaces

VESDA®

VESDA Continuing its Leadership… with the VESDA VLF

"Critical areas have become smaller…smaller areas have become more critical"

The continued trend towards smaller and more concentrated critical high-technology business operations has driven the need for more flexible and focussed very early warning smoke detection solutions to protect these high value assets. Understanding and responding to these needs, the VESDA VLF extends the product range by offering VESDA detection performance for smaller critical areas previously overlooked or limited to conventional protection methods.

Bringing Very Early Warning Air-sampling Solutions to Smaller Critical Environments

- Laser Based Absolute Smoke Detection
- Very Early Warning of a Potential Fire Incident
- Wide Sensitivity Range - 0.025 - 20% obs/m (0.008 - 6.25% obs/ft)
- Detection Capabilities for smaller critical areas up to 250 m² (2,690 sq. ft) with VLF-250 or 500 m² (5,380 sq. ft) with the VLF-500.
- Dual Stage Dust Filtration
- Programmable Alarm Thresholds
- Reliable Airflow Monitoring*
- Easy User Interaction
- AutoLearn™ Smoke & Flow
- Pre-engineered Pipe Designs
- Flexible Interfacing Options

Applying Very Early Warning Risk Management Principles to Smaller Critical Areas

Complementing the current VESDA detector range demonstrating its exceptional application flexibility, the VESDA VLF allows for superior very early warning air-sampling in areas such as:

- Local Telecommunication Exchanges
- Correctional Facilities
- Smaller Server Rooms
- Utility Control Hubs
- Control Rooms
- Railway Signal Hubs
- Switch Rooms
- Cabinets
- Storage Facilities
- Substations
- Air-handling Units

Reliable Airflow Monitoring using Ultrasonic Sensing

With the VESDA Pipe Network being such an integral part of any VESDA Air-sampling System, maintaining its integrity and reliability is critical in ensuring a consistently accurate level of detection performance. The VESDA VLF utilizes Ultrasonic Flow Sensing principles to assist in the measurement & monitoring of airflow. The VESDA VLF detector immediately identifies and communicates any variances in the airflow rate.
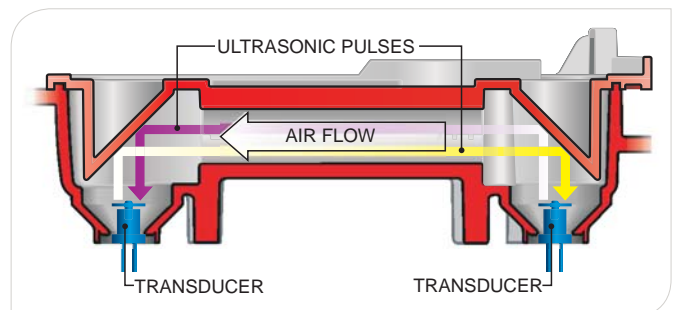
In this application, the ultrasonic flow sensing technology was adapted to monitor air rather than fluids. Two transducers (Blue) are used to continually send signals to each other. One signal travels with the flow (Violet), the other against (Yellow). The time difference between the two signals is used to calculate the rate of airflow within the pipe.

Unprecedented Event Identification with the Revolutionary Instant Recognition Display

The VESDA VLF has been equipped with a clear, intuitive, circular 'smoke dial' display that allows for immediate risk assessment and preventative action. When illuminated, the well positioned LEDs and related icons allow for instant identification of smoke growth and alarm conditions, even from a distance.

VESDA®

Immediate Analysis and Diagnostics with the Instant Fault Finder™

To ensure ongoing system integrity, immediate assessment of the detector's condition is critical. By opening the field service access door, the operator can activate the Instant Fault Finder feature – a smart diagnostic feature that converts the 'smoke dial' into a fault indicator. It provides instant and meaningful information of the detector's status without the need for additional programming and evaluation tools. Now fire service and maintenance staff can be better informed before arriving onsite, reducing the time onsite, and saving on maintenance costs.

Supporting Efficient System Setup – AutoLearn™

Simplifying the setup, installation and commissioning of high sensitivity air-sampling technology was one of the key drivers behind the design of the VESDA VLF. VESDA's AutoLearn feature supports this process by assessing environmental conditions, automatically setting acceptable smoke alarm and flow fault thresholds.

Simplifying Pipe Network Design

To simplify the application of air-sampling detection the VESDA VLF is supplied with pre-engineered pipe network designs. Designers can simply apply these proven designs to typical installations and have confidence that they will work.

Intelligent Software Support VSC™ and ASPIRE™

VESDA VLF is supported by the next generation of VESDA intelligent software packages. The VESDA System Configurator Software (VSC) offers a high-level of programming flexibility through its on-line and off-line configuration capabilities. Rapid diagnostic abilities, concurrent configuration views, and multi device smoke trending are additional features designed to simplify system design.

Complementing VSC, ASPIRE speeds up and simplifies the design of new and more complex pipe network layouts.

Key features such as design wizards, isometric views, an automated design verification process, and improved AutoBalance capabilities ensure that a tailored pipe layout is easy to achieve.

Both VSC and ASPIRE are backwards compatible with the VESDA Laser-based detector family.

A Solid Foundation Upon Which To Build

Incorporating detection methodology derived from its VESDA predecessors – the VESDA VLP, VLS and VLC – the VESDA VLF multiple point air-sampling technology works by utilizing a highly efficient aspirator that continually draws air into its laser detection chamber via a pipe network. Accurate assessment of the air sample using calibrated detection and long detector life expectancy, are assured with a patented dual stage filtration process that both eliminates background 'noise' and preserves the optical integrity of the laser technology with its clean air bleed. The result of which is an unchallenged detection process able to provide reliable and consistent very early warning smoke detection performance across a diverse range of applications.
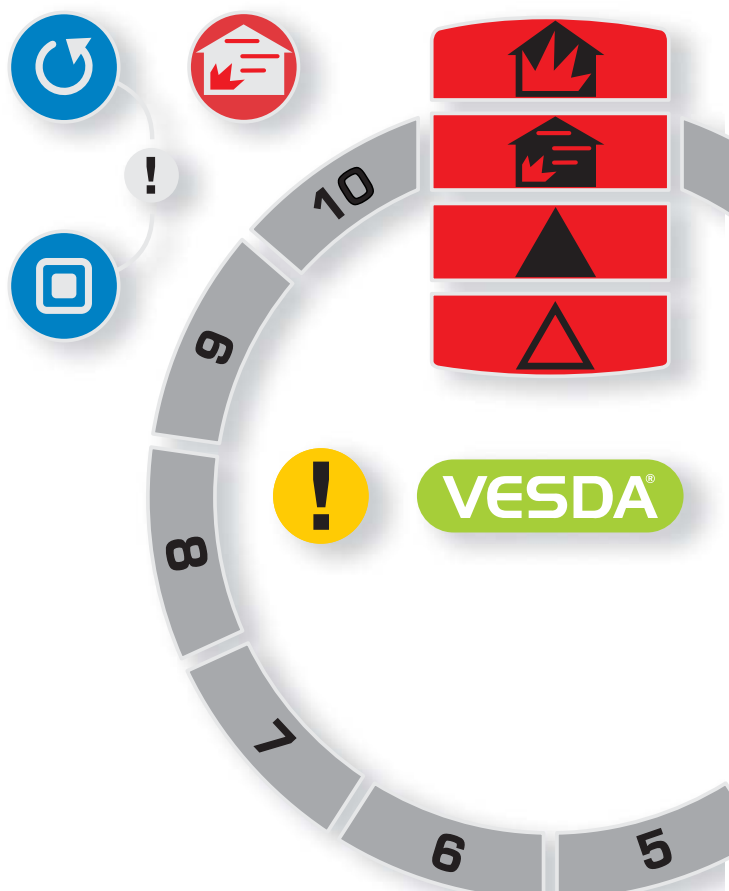
About Xtralis

Xtralis® is the leading global provider of converged solutions for the early detection and remote visual verification of fire, gas and perimeter threats.

Our technologies prevent disasters by giving users time to respond before life, critical infrastructure or business continuity is compromised. We protect high-value and irreplaceable assets belonging to the world's top governments and businesses.

Our brands include the VESDA-E – the next generation of aspirating smoke detection technology; VESDA® – the world's No.1 very early warning aspirating smoke detection (ASD) systems; ICAM™ for flexible ASD; ECO™ – Gas detection & environmental monitoring modules for VESDA & ICAM systems; OSID™ – easy to use smoke detection for open areas; ADPRO® – passive infrared sensors, perimeter, multisite, video analytics and enterprise security; HeiTel™ – digital video remote monitoring; and, ASIM® – intelligent traffic detection. To learn more, please visit us at www.xtralis.com.

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