# VESDA by Xtralis
The World's No. 1 Brand of Aspirating Smoke Detector (ASD)

The World's No. 1 ASD brand

VESDA by Xtralis 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 warnings, 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.
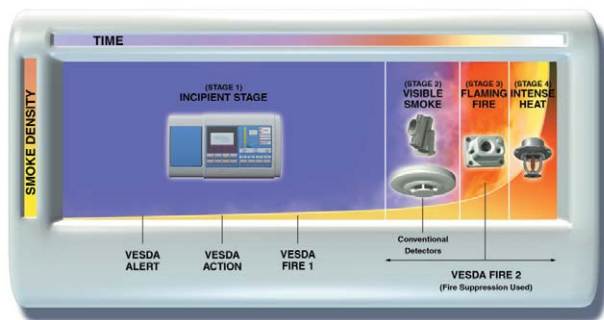
This diagram shows the progression of a fire over time. Note that the incipient stage of a fire provides the widest window of opportunity to detect and control the spread. VESDA detectors can be configured to generate multiple alarms within the incipient stage. They also can be configured to generate an additional alarm (Fire 2) in the advanced stages of a fire. This feature is unique to VESDA and takes advantage of its wide sensitivity range that enables one detector to monitor the entire progression of a fire.

How VESDA works

VESDA works by continuously drawing air into a 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 stable calibration and long detector life as well as minimizing nuisance alarms.

From the filter, the air sample goes through the calibrated 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).

7 Reasons for VESDA

1. When business continuity is paramount
2. When smoke is difficult to detect
3. When maintenance access is difficult
4. When unobtrusive detection is required
5. When evacuation is a challenge
6. When environmental conditions are difficult
7. When suppression systems are present
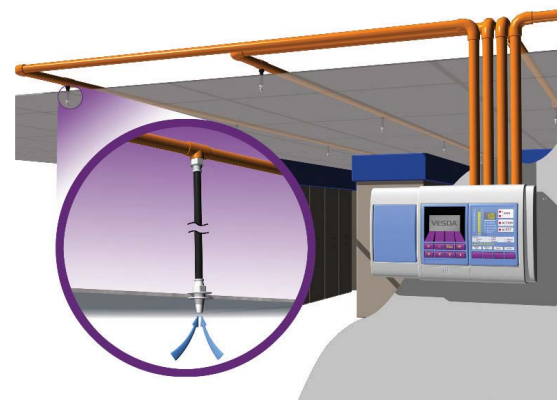
| Industrial VESDA VLI | VESDA VFT | VESDA VLP | VESDA VLS |

| VESDA VLC | VESDA VLF | VESDA Remote Display Modules | VESDA Ex d |

VESDA Product Range

VESDA VLI: An industrial-strength detector that boasts a ruggedized enclosure providing protection against dust and water spray and incorporates an industry-first, patented, fail-safe, "intelligent filtration" technology designed to reduce contamination that might enter a detector, improving detector longevity and reducing service and maintenance.

VESDA VFT: A unique and versatile high-sensitivity ASD that is able to pinpoint the source of incipient smoke to speed response, enhance investigation, and minimize business disruption and downtime. The VFT provides intelligent addressability to identify up to 15 protected areas.

VESDA VLP (LaserPLUS™): The VESDA VLP detects fire at the earliest possible stage and reliably measures very low to extremely high concentrations of smoke. It has the world's widest sensitivity range of 0.0015 to 6% obs/ft. (0.005 to 20% obs/m) and supports four configurable alarms, protecting areas up to 20,000 sq. ft. (2,000 m²).

VESDA VLS (LaserSCANNER™): The VESDA VLS locates the origin of smoke by identifying the first sector (pipe) with the highest level of smoke and then continues to sample air from all sectors to monitor fire growth. The VESDA VLS also provides four alarm levels for each individual pipe and provides individual pipe addressability and settings. It protects areas up to 20,000 sq. ft. (2,000 m²).

VESDA VLC (LaserCOMPACT™): The VESDA VLC offers cost-effective protection of single environments and small areas. It offers the same wide sensitivity range as the VESDA VLP and VESDA VLS and supports three configurable alarm levels. It is available in two versions; one version interfaces via relays only (RO) and the other across either relays or VESDAnet (VN). An explosion-proof version of the VN VLC is also available.

VESDA VLF (LaserFOCUS™): The VESDA VLF delivers the most advanced and cost-effective ASD technology for small environments. The VESDA VLF-250 protects areas up to 2,500 sq. ft. (250 m²), and the VESDA VLF-500 covers up to 5,000 sq. ft. (500 m²). In addition to the features found in all VESDA products, the VESDA VLF provides a new range of features and built-in intelligence for quick installation, commissioning and servicing.

Remote Displays and Programmers: The VESDA display module monitors and reports the status of a detector, providing visual representation of smoke levels along with all alarm and fault conditions. The menu-driven VESDA Programmer allows the user to conveniently configure, commission and maintain the VESDA system, as well as program each individual detector.

VESDAnet™: VESDAnet is a comprehensive, fault-tolerant, "closed," two-wire communications loop that links VESDA detectors, displays, programmers and remote units on a daisy-chained loop. It enables a number of units to be programmed together from one or more locations and automatically detects communication failures. It also easily interfaces with systems external to the network, such as intelligent fire alarm panels and building management systems.

VESDA Pipe: A key element in the performance of a VESDA ASD system is the network of sampling pipes that actively transports air from a protected area to the detector. Xtralis offers an extensive range of pipe and fittings to suit all application needs.

VSM™: A software package that allows the user to monitor, configure and control a VESDA system from a central location via a VESDAnet communication loop or directly to VESDA detectors.

VSC™: A software package that can be used to configure, install, commission and maintain the standard range of VESDA ASDs. The software provides high-level programming flexibility through its on-line and off-line configuration capabilities.

VESDA ASPIRE2™: The latest version of VESDA sampling pipe network design and modeling software. It aids in the design and evaluation process for basic to very complex pipe-network layouts.

For detector configuration comparison, refer to document #18327 on our web site.

Applications

- Accommodation (Apartments, Hotels, Shops and Offices)
- Correctional Facilities
- Clean Rooms
- Cold Storage
- Cultural/Heritage
- Data & Telecom
- Hospitals and Healthcare
- Insurance
- Marine
- Nuclear Facilities
- Oil & Gas
- Portable Switch Rooms
- Power Generation
- Records Storage
- Transportation
- Wind Power Generation
- Warehousing

Approvals

UL USA

CFE China

BOMBA Malaysia

ULC Canada

ONORM Austria

VNIIPO Russia

Bureau Veritas Marine Division France

Conformite Europeene EU (EMC)

HK Fire Services Hong Kong

(SMA) C-Tick Australia

CSFM US

ACTIVFIRE Australia

FM Global Worldwide

AFNOR France

Lloyds Register

LPCB WORLDWIDE EN 54-20

ITS UK

INTYG Sweden

EC/CPD EN 54-20

FDA Laser Safety USA

FM-Hazardous Areas Global Worldwide

VdS Europe

NY-MEA USA

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