



Commercial Buildings

Protecting life safety,
service continuity and
high value assets

VESDA[®]
by  **xtralis**[™]

The shortcomings of conventional systems are **obvious**

Challenges faced...



Assured Performance

Risk of tampering or misuse is a challenge for conventional smoke detectors. In environments with high flow such as server room and large, open spaces, smoke gets diluted easily and is not detected by passive conventional smoke detectors.

Aesthetics

Many modern building complexes and executive office interiors have their aesthetics compromised by the presence of conventional point (spot) smoke detectors. Architects are looking for alternatives which can provide discreet or invisible detection.



Access

Maintenance of conventional smoke detectors in large commercial and industrial buildings is often difficult and expensive where access to the detector is regulated and complicated by hard to access areas.

Vandalism and Nuisance Alarms

Where conventional detectors are placed in public spaces they are obvious and recognizable. They get vandalized and are subject to mischief causing nuisance alarms, both at great cost to service continuity and maintenance budgets.



Asset Protection

Loss of precious possessions from smoke and fire damage can be enormous and difficult to prevent without early warning detection. Water released by any sprinklers might control a fire for the benefit of a building structure but would most likely destroy occupier assets. Costs and delays for clean up of smoke and water damage can be massive.

Life Safety and Environmental Quality

Reducing the risk of injury and loss of life from smoke inhalation requires a dependable system that provides local annunciation and remote indication to first responders. Improving the quality of the air within the occupied environment requires more sophisticated sampling technologies than are commonly available.



VESDA by Xtralis Solutions...



Assured Performance

VESDA by Xtralis ASD detectors actively draw air samples to a central detector for analysis and constantly monitor the airflow to ensure reliable sampling. Any tampering with the pipe network or restriction on the airflow raises a fault that can be indicated locally to occupants or centrally to maintenance staff. Since the incipient smoke is most likely to travel with the airflow, positioning VESDA pipework at the return air grille of the AHU (air handling unit) ensures that any fire event generated in the environment is identified at the earliest stage.

Aesthetics

The VESDA family of Air-sampling Smoke Detectors (ASD) sample smoke through piping that can be easily installed and concealed. In properties with ornate ceilings the microbore sampling pipe or discreet sampling points can be installed without either damaging or disfiguring the building structure.

All that can be seen of this high-tech smoke and gas detection system is an unobtrusive capillary tube or fitting painted to match the decor (as shown) or a low profile stainless steel sampling point.



Access

Air-sampling smoke detectors can be located outside of the protected space, allowing convenient servicing of the system without necessarily requiring access or interruption.

Vandalism and Nuisance Alarms

VESDA detectors provide multiple levels of alarm to provide time to respond to an event with the appropriate level of urgency and the minimum disruption. Very early warning alarms can alert facility management staff or occupants to respond before brigade or emergency services are involved. Rugged vandalism-proof sampling points are available for high-traffic and high-risk public spaces.



Asset Protection

The very high sensitivity of VESDA detectors (typically 1,000 times more sensitive than conventional detectors) can provide time for investigation of the earliest signs of incipient fire, before smoke is even visible. Risks of flaming fire and large volumes of smoke can often be completely avoided and actuation of suppression systems avoided. Should suppression be required, VESDA solutions provide the most reliable detection of high levels of smoke.

Life Safety and Environmental Quality

The very early warning capabilities of VESDA detectors allows monitoring for very low levels of smoke, often seen in smoldering fires and below levels known to be toxic or unhealthy.

Combined with a VESDA ASD system, the latest VESDA ECO system replaces multiple spot detectors with a single system that reliably detects a wide range of harmful gases while monitoring air-quality levels.



VESDA by Xtralis is the #1 brand specified by fire prevention professionals around the world

Why use a VESDA system?

When selecting an aspirating smoke detection system for commercial buildings, consider:

Look for	Why?	What VESDA by Xtralis offers
The highest sensitivity	To achieve the earliest possible warning of a fire.	VESDA can detect smoke at 0.0015% obs./ft.
Wide sensitivity range	So that detection levels can be set to suit the environment, avoiding false alarms, and allowing appropriate responses throughout the life-cycle of a fire.	VESDA detectors have a sensitivity range of 0.0015 to 6% obs./ft. to suit diverse environments.
Multiple programmable alarm thresholds	So that the response can be appropriate for the stage of the fire, from 'Investigate' at the first alarm through to 'Activate smoke exhaust system' or 'Release suppression' at the fourth alarm level.	VESDA has 4 programmable alarm levels for intelligent responsive actions.
Event log and reporting	A forensic tool for investigating faults, alarms, user actions and smoke trends	Each VESDA detector has an event log that stores the last 18,000 events.
A wide product range	So that there's a product to suit any size area that you want to protect... from a large, open office atrium to within the confines of a single switch room or cabinet.	VESDA has the widest product range on the market.
Protected optics and absolute calibration	Ensures repeatable and reliable detection of very slow growth incipient fires and long life without need for drift compensation or relative scaling.	VESDA detectors feature a clean-air barrier to keep all optics free of contamination for a long service life without calibration.
Broad range of integration options	Choice of fire systems and partners.	Open interfaces, flexible integration options and a strong partner network.
Monitoring and control of smoke detectors from a Central Monitoring Station or Emergency Control Room	Allows response to be controlled and monitored from a central point by trained operators.	Using VESDA System Management (VSM4) software, every VESDA detector can be controlled and monitored remotely.
An accredited global distribution and support network supported by strong applications engineering experience	So you get the right technical advice when you need it.	All distributors of VESDA products are factory-accredited.

Approvals



CFE

Need more information?

Contact your local Xtralis office or visit us on the web at www.xtralis.com to access information about the VESDA smoke detector product range. Register to our Life Partner Extranet to gain access to a wealth of information including VESDA System Design Manuals and Application Notes for a wide array of environments.

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