ADVANCED DETECTION GLOBAL SERVICES
CONSULTING, DESIGN AND TRAINING






LEARN MORE: XTRALIS.COM

CONTENTS

Life Safety Solutions by Advanced Detection Global Services	2
About Advanced Detection Global Services	3
Advanced Detection Technologies	3
Advanced Detection Global Services Offerings	4
Life Safety Detection Technologies	8
VESDA-E Aspirating Smoke Detectors (VEU, VEP, VES)	9
VESDA-E VESDA-E Remote Accessories Display, Relay and 19” Sub-Rack	10
VESDA-E VEA Aspirating Smoke Detectors	11
VESDA Laser Aspirating Smoke Detectors	12
FAAST FLEX aspirating smoke detectors	13
Xtralis VIS-IR™ Thermography Detectors	14
FAAST LT Aspirating Smoke Detector	15
ICAM Aspirating Smoke Detectors	16
VESDA XCL Aspirating Gas Detectors	17
Xtralis Li-ion Tamer GEN 3	18
OSID - Open area Smoke Imaging Detectors	19
Li-ion Tamer Sensor Multi Output Solution (LT-MOS)	20
Agile™ Stay Connected, Stay Protected	21

LIFE SAFETY SOLUTIONS BY ADVANCED DETECTION GLOBAL SERVICES

Solution \ Product/Brand	xtralis							SYSTEM SENSOR		
	VESDA-E	VESDA-L	ICAM	FAAST FLEX	VESDA Sensepoint	OSID	Li-ion Tamer GEN 3	BEAM	FAAST LT	Agile Wireless
Aspirating Smoke Detection										
Aspirating Gas Detection										
Open Area Beam Smoke Detection										
Wireless Spot Detectors										
Wireless M Call Points/ Audio Visual										
Detection of Electrolyte Solvent Vapours (Off-Gas Phase) from Lithium-ion Battery										

ABOUT ADVANCED DETECTION GLOBAL SERVICES

The Global Services Design Center was established in 2010 to provide value-added training, consultation, design, and technical support for advanced technologies; VESDA-E, VESDA-L, OSID, and ICAM. The design center offers application-specific expertise and knowledge accumulated over 30+ years of success delivering high quality and optimised project designs. In 2018 the design center added System Sensor solutions to its design services portfolio. Now customers can get the same expertise for any life safety application from aspirating smoke detection to open area detectors and wireless smoke detectors.

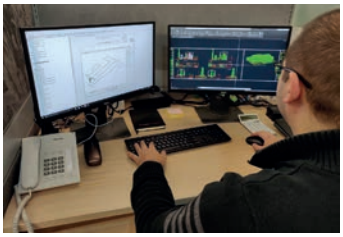
ADVANCED DETECTION TECHNOLOGIES

ASPIRATING SMOKE DETECTION	**VESDA-E - THE NEXT GENERATION OF ASPIRATING SMOKE DETECTION** VESDA-E is the next generation of aspirating smoke detection (ASD) from Xtralis. VESDA-E offers ultra-sensitive ASD with up to 15 times higher sensitivity than current VESDA models, improved dust rejection, and up to 8% less power consumption per unit area. VESDA-E brings precision addressability to ASD with flexible tubing and up to 40 individual sampling points per system. Other VESDA-E advanced features include StaX expansion modules with capabilities like auto pipe clean and integrated power supply, connectivity from WiFi to the Ethernet and mobile devices. VESDA-E is the most advanced, reliable, and flexible ASD system ever. **VERY EARLY WARNING ASPIRATING SMOKE DETECTION** Xtralis and System Sensor ASD provides highly reliable smoke detection at the earliest presence of fire while discriminating against false alarms. Traditional smoke detectors do not offer comparable protection as smoke can begin to spread, and fire damage can occur before a warning is issued. In contrast, Xtralis VESDA, ICAM, FAAST FLEX and System Sensor FAAST ASD systems continuously sample the air for the smallest traces of smoke to provide valuable time to understand a threat and deploy an intelligent response. Xtralis and System Sensor life safety solutions provide reliable smoke detection in zero-tolerance environments, adhering to the highest safety standards and mitigating risks to facilities, assets, and personnel. **GAS DETECTION AND ENVIRONMENTAL MONITORING** Xtralis ASD systems can be extended to include gas detection and environmental monitoring. Xtralis has partnered with Honeywell Analytics to develop VESDA Sensepoint XCL gas detector to provide early warning of gas threats. This combination of smoke and gas detection in one system offers occupant protection and system monitoring while ensuring against fire threats.
OPEN-AREA (BEAM) SMOKE DETECTION	**OSID OPEN AREA SMOKE DETECTION** OSID is a robust, standard sensitivity detection system which is based on the patented use of digital imaging and smart algorithms. Installation and commissioning is simplified because of the use of CMOS imagers, representing 100 of thousands of traditional photo receivers. Aligning and installing these beams is reduced to a matter of minutes. This technology also solves the number one problem with beams, building movement. The novel use of CMOS imagers enables OSID to discriminate between smoke and other objects, thus dramatically reducing false alarms. The use of this technology allows these beams to no longer alarm when saturated by heavy light, but at the most signal a fault. The OSID range features both reflective and end-to-end systems. End-to end systems come with a dual IR/UV wavelength and are even more resistant to false alarms in challenging environments. End-to-end systems feature 7 Emitters for 1 Imager solution, offering a true 3D detection.
DETECTION OF BATTERY ELECTROLYTE SOLVENT VAPOURS (OFF-GAS PHASE)	**LI-ION TAMER GEN 3** The Li-ion Tamer off-gas detection system is a device that monitors lithium-ion battery's electrolyte solvent vapours which occur early in the failure mode of lithium-ion batteries, and the very early detection of these electrolyte solvent vapours allows proper mitigation steps to be taken to avoid a catastrophic thermal runaway failure. The Li-ion Tamer off-gas detection system is designed to be plug-and-play, easily to install and requires minimal operation and maintenance procedures as the gas sensors are designed to be calibration-free and have comparable lifetime to the battery Energy Storage System (ESS).
WIRELESS FIRE DETECTION	**AGILE WIRELESS** The new System Sensor Agile wireless fire detection system offers unmatched levels of communication reliability and installation flexibility due to patented mesh network technology. It provides a robust and efficient method of delivering an integrated smoke detection solution across a wider variety of applications, with greater simplicity and scalability.

ADVANCED DETECTION GLOBAL SERVICES OFFERINGS

ADGS offers unparalleled applications, design, consulting and technical services for Xtralis and System Sensor solutions. Our designers, engineers, and trainers provide world-class expertise in smoke, fire, and gas detection applications, so that your project is efficiently designed, managed, and deployed for maximum protection.

DESIGN AND CONSULTING SERVICES



Our team will consult, guide, and manage your project design with:

- Analysis and review of project; design documents;
- Initial design solution based on customer needs; and…
- Detailed and comprehensive design package for all systems - engineering layout, design calculations, and final project bill of materials (BOM).

In addition, we can optionally provide expert, value-added capabilities, including:

- Advanced design package including Building information modeling (BIM) and computational fluid dynamics (CFD) output files
- Consultation with authorities having jurisdiction (AHJ), insurers, consultants, architects; engineers to propose new solutions to improve current industry standards and provide expert assessment of existing fire codes worldwide.

Description	Type	Solutions	Ordering Code
Performance-Based Design for ASD	Per Package, Per Day, Based upon Project Scope	VESDA-E, VESDA, FAAST, ICAM	SR-PBD
Application Engineer Onsite Visit	Onsite Visit, Per Solution, Per Day	VESDA-E, VESDA, FAAST, ICAM, OSID, Agile, XCL	SR-FSV

Description	Type	Solutions	Ordering Code
Customized Design Package: • **Includes Standard Package + BIM (Revit)**	1-Port ASD (per Unit)	VESDA-E, VESDA, FAAST, ICAM	SR-CDP-1PASD
	2-Port ASD (per Unit)	VESDA-E, ICAM, FAAST FLEX	SR-CDP-2PASD
	4-Port ASD (per Unit)	VESDA-E, VESDA	SR-CDP-4PASD
	Multi-Port ASD (per Unit)	VESDA-E VEA	SR-CDP-MPASD
Standard Design Package: • **Includes CAD, Calculations, BOM**	1-Port ASD (per Unit)	VESDA-E, VESDA, FAAST, ICAM	SR-SDP-1PASD
	2-Port ASD (per Unit)	VESDA-E , ICAM, FAAST FLEX	SR-SDP-2PASD
	4-Port ASD (per Unit)	VESDA-E, VESDA	SR-SDP-4PASD
	Multi-Port ASD (per Unit)	VESDA-E VEA	SR-SDP-MPASD
Customized Design Package: • **Includes Sandard Package + BIM (Revit)**	Gas Detection (per ASD Unit)	VESDA XCL	SR-CDP-AGD
Standard Design Package: • **Includes CAD, Calculations, BOM**	Gas Detection (per ASD Unit)	VESDA XCL	SR-SDP-AGD
Customized Design Package: • **Includes Standard Package + BIM (Revit)**	Open Area Detection (Beam), per Transmitter	OSID-DE, OSID-R	SR-CDP-OAD
Standard Design Package: • **Includes CAD, Calculations, BOM**	Open Area Detection (Beam), per Transmitter	OSID-DE, OSID-R	SR-SDP-OAD
Standard Design Package: • **Includes CAD and BOM**	Per gateway, includes only detection part of project	Agile Wireless	SR-SDP-WSD
Design Change Request	Any design change request after design concept approval, per work hour		SR-DCH-AT
Customized Design Package, LT Detector, Price per Unit	Detection of Electrolyte Solvent Vapours from Lithium-ion Batteries	Li-ion Tamer GEN 3	SR-CDP-LT

ADVANCED DETECTION GLOBAL SERVICES OFFERINGS

ADGS DESIGN SUBSCRIPTION SERVICE

ADGS Design Subscription Service is a subscription-based design service where experts at ADGS provide design subscription services to integrators and distributors. The subscription service provides a range of services from simple design reviews to full system designs; detector layout and placement, full bill of materials and application guidance. Key features of subscription are:

- 3 levels of subscription: Silver, Gold and Platinum
- Full Design Service – Taking engineering drawings of the project, ADGS will design ASD detection to meet a require local code or customer standard; provide pipe layouts on the drawings; the accompanying ASPIRE calculations; detailed Bill of Materials and any application based advise
- Design Review – ADGS will review the design provided by customer and ASPIRE files (if provided) and provide feedback
- Project Consultancy – Application advice and guidelines on detector type and initial BOM (detectors & accessories) based on application & code requirement

Description	Type	Ordering Code
Yearly ASD Design Subscription. Platinum	Yearly Design Subscription	SR-DSS-PLATINUM-YR
Yearly ASD Design Subscription. Gold	Yearly Design Subscription	SR-DSS-GOLD-YR
Yearly ASD Design Subscription. Silver	Yearly Design Subscription	SR-DSS-SILVER-YR
Monthly ASD Design Subscription. Platinum	Monthly Design Subscription	SR-DSS-PLATINUM-MO
Monthly ASD Design Subscription. Gold	Monthly Design Subscription	SR-DSS-GOLD-MO
Monthly ASD Design Subscription. Silver	Monthly Design Subscription	SR-DSS-SILVER-MO

APPLICATIONS ENGINEERING AND PERFORMANCE-BASED DESIGN

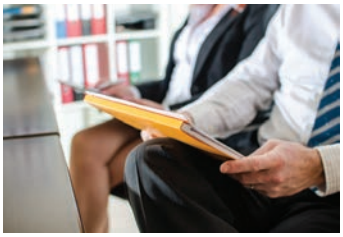
ADGS Applications Engineers provide consultancy services that deliver cost-effective, code compliant, and innovative fire protection solutions, including:



- Fire detection systems design
- Advice on regulation and code compliance and support during the regulatory authorities' approvals process.
- Fire simulation and modelling to evaluate and optimize fire detection system performance
- Fire risk assessments
- Guidance in designing solutions that address maintenance requirements and reliability challenges in harsh environments
- Advice on integrating detection and gaseous suppression systems for the protection of critical equipment
- Developing risk-informed, performance-based designs to:
  - Address restrictive codes and standards and non-compliance issues,
  - Incorporate flexible design features for effective emergency response planning,
  - Optimize the use of available commercial building space, while meeting life safety objectives,
  - Help achieve elegant architectural design.

ADVANCED DETECTION GLOBAL SERVICES OFFERINGS

TRAINING SERVICES



ADGS offers flexible, instructor-led (virtual/physical) and online on-demand expert training services in several formats:

- 1, 2, or 3-day training
- At your facility, ADGS regional facilities or online on-demand
- Customized or standard training
- For any ADGS-supported solution

ADGS training will ensure you staff is proficient at the design, commissioning, management, and testing of any of our life-safety solutions. As training experts with decades of training experience, we have trained tens of thousands of fire professionals to an expert-level proficiency with advanced detection technologies.

ONLINE TRAINING SERVICES - XTRALIS UNIVERSITY

Training is delivered through Xtralis University, our online Learning Management System (LMS), which provides more visibility to the breadth of our training offerings.

Through Xtralis University you have access to a curated library of content developed and delivered online on-demand by knowledgeable industry experts. You are able to access trainings that meet your needs to improve your product expertise, register for online on-demand or instructor-led sessions, and retrieve certifications at the click of a mouse or tap of the screen.

VIRTUAL INSTRUCTOR-LED & CLASSROOM TRAINING

- Xtralis VESDA Engineering (VSC)
- Xtralis VESDA Applications & Design (ASPIRE)
- Xtralis VESDA-E VEA Advanced Engineering
- Xtralis VESDA & ASPIRE Virtual Instructor-Led Training
- Xtralis VESDA VEA Virtual Instructor-Led Training
- Xtralis VESDA & ASPIRE Classroom Instructor-Led Training-Danish Langua

ONLINE ON-DEMAND TRAINING

- Xtralis OSID Training
- Xtralis SWIFT® Wireless
- Xtralis VESDA Introduction Training
- Xtralis VESDA ASD Accreditation Certificate Online On-Demand Training
- Xtralis VESDA Air Sampling Smoke Detection Recertification Training
- Xtralis VSM4 Technical Training Course
- Xtralis Li-ion Tamer GEN 3 / Xtralis Li-ion Tamer GEN 2+
- FAAST FLEX™ (EN)
- Xtralis VIS-IR™ Thermography Detector
- VESDA-E UL268 7th Edition
- Xtralis VESDA-E Remote Accessories
- Li-ion Tamer Sensor Multi Output Solution (LT-MOS)

To access Xtralis University, click here.

Contact your regional Xtralis, System Sensor, or Honeywell Sales person for a quote. When referencing Design Services or Training, please refer to the ordering codes below. For specific questions about any of these services please contact DesignCenter@xtralis.com or TrainingServices@xtralis.com.

Submit a web request form via www.xtralis.com/adgs.

Note: We will continue to use the current regional Training scheduling, registration, and payment process until a new structure is established. A centralized Training registration process will be available soon, and the table below lists the Training SKUs. Please continue to use the current process and current Training SKUs until further notice.

ADVANCED DETECTION GLOBAL SERVICES OFFERINGS

VIRTUAL INSTRUCTOR-LED & CLASSROOM TRAINING

Training	Part No.	Region
Xtralis VESDA Engineering (VSC)	T-FIRE-XTR-ASDENG	UK, EU & META
Xtralis VESDA Applications & Design (ASPIRE)	T-FIRE-XTR-ASDAPP	UK, EU & META
Xtralis VESDA-E VEA Advanced Engineering	T-FIRE-XTR-VEA	UK, EU & META
Xtralis VESDA & ASPIRE Virtual Instructor-Led Training	T-FIRE-XTR-VSDASP	US & Canada
Xtralis VESDA VEA Virtual Instructor-Led Training	T-FIRE-XTR-VEA	US & Canada
Xtralis VESDA & ASPIRE Classroom Instructor-Led Training	SR-3DT-SCA	US & Canada
Xtralis VESDA & ASPIRE Classroom Instructor-Led Training-Danish Language	T-FIRE-XTR-VSDASP	Denmark

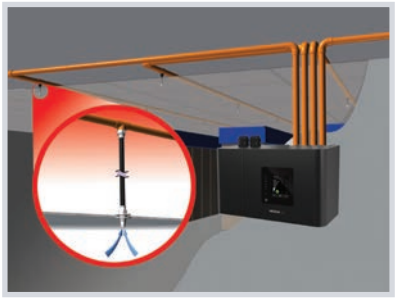
ONLINE ON-DEMAND TRAINING

Description	Location	Requirements	Solutions	Ordering Code
1-Day Training, Standard Course (including refresher)	ADGS Regional Facility	• 10 attendees minimum • Cost quoted per attendee	VESDA-E, VESDA, FAAST, OSID, XCL	SR-1DT-SCA
2-Day Training, Standard Course			VESDA-E, VESDA, FAAST, OSID	SR-2DT-SCA
3-Day Training, Standard Course			VESDA-E, VESDA, FAAST	SR-3DT-SCA
1-Day Training, Private Course	Customer Facility	• 20 attendees maximum • Cost quoted per group • Trainer cost billed separately (see below)	VESDA-E, VESDA, FAAST, OSID, XCL	SR-1DT-PCG
2-Day Training, Private Course			VESDA-E, VESDA, FAAST, OSID	SR-2DT-PCG
3-Day Training, Private Course			VESDA-E, VESDA, FAAST	SR-3DT-PCG
Xtralis OSID Training	Global			Free
Xtralis SWIFT® Wireless	Global			Free
Xtralis VESDA Introduction Training	Global			Free
Xtralis VESDA ASD Accreditation Certificate Online On-Demand Training	Global			T-FIRE-XTRASDACC
Xtralis VESDA Air Sampling Smoke Detection Recertification Training	Global			T-FIRE-XTRASDREC
Xtralis VSM4 Technical Training Course	Global			T-FIRE-XTRVSM4
Xtralis Li-ion Tamer GEN 3 / Xtralis Li-ion Tamer GEN 2+	Global			T-FIRE-XTRLT
Xtralis FAAST FLEX™ (EN)	UK, EU & META			T-FIRE-XTRFFLEX
Xtralis VIS-IR™ Thermography Detector	Global			T-FIRE-XTRTHERM
Xtralis VESDA-E UL 268 7th Edition	AMERICAs			T-FIRE-XTRUL7th
Xtralis VESDA-E Remote Accessories	Global			T-FIRE-XTRVEACC
Li-ion Tamer Sensor Multi Output Solution (LT-MOS)	Global			T-FIRE-XTRLTMOS
Trainer Travel	Trainer or FAE International or Domestic travel cost			SR-TR-EXP
VESDA Champion Subscription Program	Price per Year			SR-SUB-1YR

LIFE SAFETY DETECTION TECHNOLOGIES

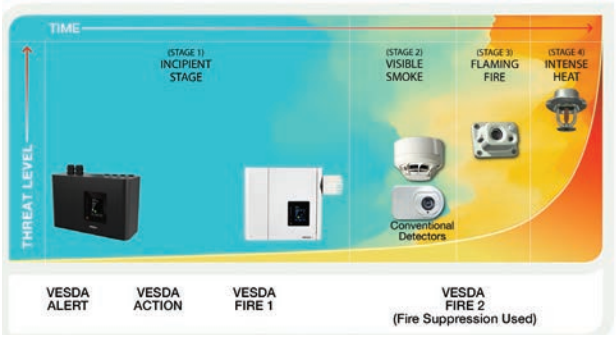
ASPIRATING SMOKE DETECTION - THE SOONER YOUR KNOW®

HOW ASD WORKS?



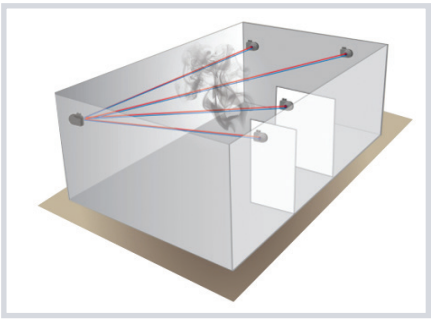
ASD works by continuously drawing air into a distributed pipe network via a high-efficiency aspirator. The air sample then passes through a filtration process. This to remove dust and dirt from the air sample before it enters the laser detection chamber. Also, an additional clean-air supply to keep the 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. ASD systems can communicate this information to a fire alarm control panel, a software management system, or a building management system.

WHY USE ASD?



VESDA & FAAST aspirating smoke detection solutions with continuous air sampling provide the earliest possible warning of an impending fire hazard. VESDA aspirating smoke detectors buy the critical time needed to investigate an alarm and initiate an appropriate response to prevent injury, property damage or business disruption. These detectors have multi-level warnings and a wide range of sensitivity that does not degrade or change over time, so even minute levels of smoke can be detected before a fire has time to escalate.

OSID - OPEN AREA SMOKE IMAGING DETECTION



OSID is a robust, standard sensitivity detection system which is based on the patented use of digital imaging, dual-frequency beams, and smart algorithms. The novel use of dual light frequencies in an open-path device enables OSID to discriminate between real smoke and other objects, thus dramatically reduce false alarms.

Installation and commissioning is simplified because exact alignment between the imager and emitter is not required. An imager can locate and lock in an emitter that is only roughly aligned thanks to the imager's wide field of view. And because OSID uses a wide-angle imaging sensor, its sophisticated algorithms compensate for vibrations and building movement. The option of a battery-powered emitter means that cabling and installation costs also are reduced significantly.

WIRELESS FIRE DETECTION



The new System Sensor Agile wireless fire detection system offers unmatched levels of communication reliability and installation flexibility due to patented mesh network technology. The new wireless platform is powered by robust mesh network technology providing up to two communication paths to each wireless device. This makes the network highly reliable, protecting against broken communication links.

The Agile Wireless Fire Detection System is an extension of the Series 200 product range. It features the same class leading device design, detection performance, false alarm immunity and system functionality. Wireless devices can be seamlessly integrated into existing panels supporting Series 200 protocols, giving the fire system the flexibility to be easily extended.

VESDA-E ASPIRATING SMOKE DETECTORS (VEU, VEP, VES)



INNOVATIVE CAPABILITIES

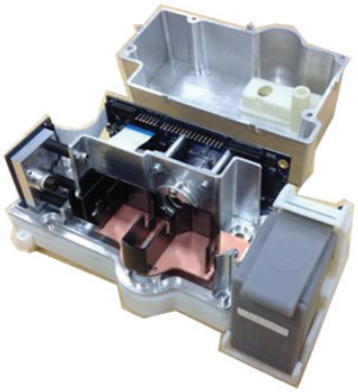
VESDA-E is the next-generation of VESDA, featuring multiple innovative capabilities that dramatically improve the VESDA experience: VESDA Smoke+, offers increased sensitivity versus VESDA VLP and improved dust rejection, while maintaining sensitivity over its lifetime and up to 8% less power consumption per unit area.

Key capabilities include:

VESDA Sector Addressability coupled with the Flair technology provides the best in VEW and more cost-effective than the standard “4 detector” approach.

VESDA Smoke+ capitalizes on the patented Flair™ Detection Technology centered in the VESDA-E detection chamber used in VEU, VEP, and VES. Flair Detection Technology offers increased sensitivity – up to 15 times greater than VESDA VLP, at least three times better dust rejection, up to twice the longevity while maintaining consistent sensitivity over time.

Flair Chamber



VESDA Flex future proof expandability for maximum flexibility using, StaX Hardware expansion modules that easily bolt onto the VESDA-E detector to add additional capabilities.

VESDA Connect allows for flexible networking and programming options that reduce maintenance and monitoring costs through extensive connectivity options and remote diagnostics tools including Ethernet, USB, VESDAnet and Relays.

VESDA TCO reduces the Total Cost of Ownership (TCO) through CAPEX value, OPEX savings, Plug’n’Play installation, design-less pipe networks, vast monitoring options and backwards compatibility. With VESDA-E you can reduce TCO by up to 15%.

VESDA-E SOLUTIONS

- VESDA-E VEU (VESDA-E Ultimate)
- VESDA-E VEP (VESDA-E Plus)
- VESDA-E VES (LESDA-E Scanner)

VESDA-E APPLICATIONS

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

For further information, please visit: www.xtralis.com/p.cfm?s=22&p=538

VESDA-E REMOTE ACCESSORIES DISPLAY, RELAY AND 19” SUB-RACK



The VESDA-E Remote Accessories are the next generation of ancillary devices designed to complement VESDA-E aspirating smoke detectors and provide primary reporting and remote monitoring of new and existing VESDA systems over VESDAnet. These remote modules are commonly used in large and restricted access areas to allow remote monitoring with added convenience and ease.

REMOTE MODULES

The remote modules consist of the following configurations:

- 3.5” Display with or without relays
- 7 or 12 Relays without Display
- VESDAnet, Ethernet and USB Connection

REMOTE MODULES FEATURES

- Elevates the accessories look and feel to that of VESDA-E detectors, thus completing the VESDA-E range
- Improves the User Experience enabled by a 3.5” touch screen display presenting rich status information and control options at the users’ fingertips
- Simplifies the Ordering Process enabled by intelligent self-morphing capability, which is compatible with legacy and new systems, hence eliminating unnecessary module prefiltration
- Enhances Connectivity enabled by a wide range of connectivity options including VESDAnet, relays, Ethernet and USB

For further information, please visit: https://xtralis.com/product/264/vesda-e-remote-accessories

VESDA-E VEA ASPIRATING SMOKE DETECTORS



A NEW APPROACH FOR POINT ADDRESSABLE SMOKE DETECTION

VESDA-E VEA introduces a new approach for addressable aspirating smoke detection. VEA provides pinpoint addressability by using a network of microbore tubes connected to sampling points located in the protected area. VEA actively draws air through sampling points and analyses for presence of smoke particles in a centrally located smoke sensor module. VEA provides assured detection through active sampling and end to end system integrity monitoring. VEA also provides flexible and fast installation utilizing easy to install flexible microbore tubes and push-fit connectors, which reduce installation time and cost. VEA detector supports 40 sampling points, all managed from a central location. Its fully supervised microbore tubes and sampling points ensure total system availability. Centralized Test and maintenance in readily accessible location reduces service time by up to 90% allowing servicing of up to 500 addresses a day lowering total cost of ownership by up to 60%. VEA remote maintenance is ideally suited in applications where interruption free business operation and restricted access are of paramount importance. With best in class connectivity including WAN and Wireless iVESDA application provides real time and remote access for efficient and effective response.

VESDA-E VEA DELIVERS BETTER VALUE WHERE...

- Spot detectors are difficult to reach
- Access to the protected area is restricted
- Disruption of occupants is undesirable
- Installation and maintenance costs are high
- Electrical codes are stringent, and conduits are mandatory
- False alarms are extremely costly
- There is high density of spot detectors

VESDA-E APPLICATIONS

- Offices
- Hospitals
- Schools
- Prisons
- Multi-story dwellings
- Data Centers
- Warehouses

For further information, please visit: www.xtralis.com/product_view.cfm?product_id=108

VESDA LASER ASPIRATING SMOKE DETECTORS



THE WORLD'S LEADING ASPIRATION SMOKE DETECTOR (ASD) BRAND

Xtralis invented VESDA very early warning aspirating smoke detection (ASD), the world's leading ASD brand. Customers worldwide rely on VESDA when business continuity is imperative, environments are challenging, and time is required to ensure safe and orderly evacuation. VESDA 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.

VESDA LASER SOLUTIONS

- VESDA VLI (Industrial)
- VESDA VLF (LaserFocus)

VESDA APPLICATIONS

- Airport
- Correctional Facilities
- Cultural and Heritage
- Highrise and Residential
- IT and Communications
- Logistics / Cold Storage
- Logistics / Warehousing
- Manufacturing
- Mining
- Oil and Gas
- Power
- Railway
- Retail and Commercial
- Waste Recycling

For further information, please visit: www.xtralis.com/p.cfm?s=22&p=244

FAAST FLEX ASPIRATING SMOKE DETECTORS



A NEW BEST-IN-CLASS ASD SOLUTION

FAAST FLEX is a best-in-class ASD solution for enhanced and standard sensitivity applications which combines effective and reliable smoke detection with ease of design, installation, commissioning & maintenance, and improved user experience.

FAAST FLEX offers a highly flexible and cost-effective ASD solution for a wide range of applications such as small to medium warehouses, cold storage, elevator shafts, ceiling and underfloor voids, transformer and electrical rooms, rest rooms and other similar spaces. It provides consistent detection with minimum nuisance alarms to reduce operational costs enabled by improved detection chamber design. The system continuously draws air from the monitored environment through a series of sampling holes to monitor the environment for smoke particulate.

FAAST FLEX FEATURES

- Single & Dual channel variants with area coverage up to 1,600m² (17,200 sq. ft) for single channel and 2,000m² (21,527 sq. ft) for dual channel
- Two configuration modes:
  - Out-of-box with built-in user-friendly configuration and control mechanism for speedy commissioning
  - Extended mode for enhanced user experience using a Bluetooth interface
- Modular design with in-field replaceable chamber, filter, and aspirator for ease of service and maintenance
- Bluetooth interface with mobile device App for extended configuration options and rapid diagnostics
- Quiet operation (45 dbA) with adjustable fan speed to suit various environments
- Suitable for cold storage environments with -40 °C (-40°F) operating temperature
- IP40 rating for protection against ingress of foreign bodies

FAAST FLEX APPLICATIONS

- Warehouse / Logistics (small to medium)
- Cold Storage
- Elevator Shafts
- Ceiling & Underfloor Voids
- Transformer, Electrical & Generator Rooms
- Rest Rooms

For further information, please visit: https://xtralis.com/product/215/faast-flex-aspirating-smoke-detector

XTRALIS VIS-IR™ THERMOGRAPHY DETECTORS



The Failsafe Thermography Detector (FTD) is a bi-spectral (IR & Visual) smart edge device that has been specifically designed for early warning heat-detection. It can directly communicate with Fire Alarm Control Panel (FACP) for Pre-Alarm, Alarm and Fault conditions. The thermography detectors provide fire detection solutions where traditional smoke/fire detectors cannot cope with high smoke and dust conditions as part of normal operating conditions. Their applications target the critical infrastructures and challenging environments such as: waste recycling, tunnels, machine and process supervision, power stations, etc.

VIS-IR THERMOGRAPHY DETECTOR FEATURES

- Bi-spectral – IR & visual
- On-board pre- alarm, alarm and fail-safe fault relay outputs
- Sensor resolution 384 x 288 pixels
- Minimum area size detected 3x3 pixels
- Detection temperature range -5°C to 450°C
- Fixed temperature and Rate of Rise Pre-Alarms and Alarms
- 3 different lenses/FOV
- 2 inputs (Reset and Air Purge Fault)
- Tri-color front LED for status signaling
- Remote LED output
- Simple and user-friendly connection
- IP66
- Operation on 24 VDC
- Pluggable connection and terminals

APPLICATIONS

- Waste management and recycling sites
- Food and drink processing plants
- Industrial sites
- Transportation and other tunnels

For further information, please visit: https://xtralis.com/product/216/xtralis-vis-ir-failsafe-bi-spectral-thermography-detector

FAAST LT ASPIRATING SMOKE DETECTOR



FIRE ALARM ASPIRATION SENSING TECHNOLOGY®

The FAAST LT-200 Aspirating Smoke Detector is designed with the installer and end user in mind. It serves the wide variety of Class C applications where maintenance is difficult, where traditional smoke detection methods are inappropriate or prone to fail due to harsh environments or areas where aesthetics matter. It is also suitable for smaller mission critical applications where very early warning - Class A or B detection is required. FAAST LT-200 combines proven aspirating detection technologies to deliver reliable smoke detection and efficient installation and maintenance.

The device comprises innovative and intelligent internal design features designed to protect vulnerable components. These include a high sensitivity LED detection chamber (featuring a high-power output IR LED and high gain IR receiver amplifier), along with ultrasonic flow sensors.

EASY TO INSTALL - EASY TO COMMISSION

The device is fast to install and easy to commission thanks to Pipe-IQ pipe design and configuration software, which is included as standard. FAAST LT-200 stand-alone devices are available as single channel and dual channel devices, offering flexibility for different detection strategies. A range of customizable settings are geared towards maximizing device performance and meeting different application needs. The device also includes pre-alarm functionality for graduated alarm thresholds. The FAAST LT-200 provides alarm and fault relays with auxiliary events relay as an option. These can be set as latched or non-latched. To accommodate local installation standards or environments, flow and general fault delays can also be set.

FAAST APPLICTIONS

- Historic buildings and high-end architecture
- Museums and galleries
- Shopping and Leisure Centers
- Residential
- Ducts, voids and lift shafts
- Custodial facilities
- High buildings
- High roof storage Areas
- Warehouses

For further information, please visit: www.SystemSensorEurope.com/English/2_Products/2_3_2_3_FAAST_LT.html

ICAM ASPIRATING SMOKE DETECTORS



FLEXIBLE SPECIALTY ASPIRATION SMOKE DETECTORS

ICAM IFT-P aspirating smoke detectors provide early warning, decreasing the likelihood of catastrophic loss and ensuring business continuity. IFT-P provides two pipe inlets with long pipe runs allowing increased flexibility in application.

EXTENDING THE CAPABILITY OF TRADITIONAL SMOKE DETECTORS

ICAM IAS detectors transform traditional point detectors into powerful aspirating systems for use in dusty and inaccessible spaces. These detectors can house virtually any manufacturer's conventional or analog addressable point (spot) detectors. Compared to the standard smoke sensitivity of a traditional smoke sensor, the ICAM ILS detector has higher sensitivity and delivers increased area coverage.

ICAM SOLUTIONS

- ICAM ILS
- ICAM IAS (Point-in-a-Box)
- ICAM IFT-P (Pico)

ICAM APPLICATIONS

- Ducts
- Elevators and Escalators
- Cold Storage
- Switch Gear
- Transportation
- Unmanned Sites
- Utilities
- Wind Turbines

For further information, please visit: www.xtralis.com/p.cfm?s=22&p=338

VESDA XCL ASPIRATING GAS DETECTORS



INTEGRATED GAS DETECTION FOR VESDA-E MICRO-BORE ASD SYSTEM

The VESDA Sensepoint XCL – Microbore ASD System is an aspirated gas detector that connects to VESDA-E VEA smoke detectors. The combined solution offers reliable detection of gases and smoke for occupant safety, asset protection and for maintaining business continuity.

Through its embedded Bluetooth interface, VESDA Sensepoint XCL enables customers to pair the gas detector with their smart device applications to perform installation, commissioning and maintenance. It integrates with other building systems, including fire alarm control panels, PLCs, HVAC and building management systems, and provides real-time situational awareness for intelligent emergency response using relays, 4-20mA or Modbus outputs.

HOW VESDA SENSEPOINT XCL - MICRO BORE ASD SYSTEM WORKS

VESDA Sensepoint XCL can be easily added to existing or new VESDA-E VEA tube networks without major construction or electrical cabling or conduit. It is capable of remote sampling up to 100m (328ft) which means the detector is not required to be physically present in the detection area. As opposed to point gas detectors, VESDA Sensepoint XCL can be installed in a central location allowing easy and non-intrusive inspection, service and maintenance where access is difficult/restricted, where interruption free business operation or safety of personnel is important.

Further cost savings are realised through easy access to diagnostic information for servicing and the ability to replace gas sensors in the field through simple steps.

HOW VESDA SENSEPOINT XCL - LARGE BORE ASD SYSTEM WORKS

VESDA Sensepoint XCL – Large Bore is designed to be incorporated to existing or new ASD pipe networks without major construction or electrical cabling / conduit and utilizes the flow in the pipe for the continuous delivery of air samples to the gas sensor for analysis. It is capable of remote sampling which means the detector can be placed outside the detection zone at a convenient location saving time and money for routine maintenance & service. Air drawn to the detector can be conditioned to remove contaminates which ensures detector maintains reliable longterm performance in a wide range of environments.

A single VESDA Sensepoint XCL – Large Bore detector delivers multi-point gas sampling capability giving it the advantage of providing greater coverage area, increased design flexibility and reliable detection in high airflow areas when compared to fixed point gas detectors.

VESDA XCL APPLICTIONS

- Boiler plant rooms
- Commercial premises
- Parking Garages
- Utility / service tunnels
- Bus and Train Locomotive Depots
- Universities and schools
- Hotels
- Hospitals
- Residential
- Laboratories, biotechnology labs, pharmaceutical

For further information, please visit: www.xtralis.com/product_view.cfm?product_id=195

XTRALIS LI-ION TAMER GEN 3



The Li-ion Tamer GEN 3 is a device that detects the venting of battery electrolyte solvent vapours (off-gassing phase) that occurs early in the failure mode of lithium-ion batteries. The early detection of this event allows proper mitigation steps to be taken to avoid a catastrophic thermal runaway failure.

The Li-ion Tamer GEN 3 system is designed to be easy to install and configure, consisting of several components: (i) sensors, (ii) hub, (iii) power switch, (iv) network switch, (v) controller.

- Each sensing node comprises an off-gas sensor with advanced algorithms making it acutely sensitive to detecting battery electrolyte vapours (off-gassing compounds), does not require calibration, is compatible with all LIB form factors and chemistries, and has a lifetime comparable to a typical LIB system. The sensing node also includes temperature and humidity sensors for environmental monitoring.
- Sensing nodes are networked by the hubs and switches to the controller, which is the central point for managing and monitoring the entire system. The controller has relays and Modbus TCP/IP outputs that connect to the BMS or other control systems.

BENEFITS OF LI-ION TAMER GEN 3

- Provides the earliest possible warning of li-ion battery failure by detecting electrolyte solvent vapours prior to thermal runaway to minimize losses/damage, and ensure business continuity
- Delivers lower installation cost via plug and play functionality, versatile sensor placement and high sensitivity multi-gas detection capability allowing one sensor placement per rack
- Provides pinpoint addressability for the venting of electrolyte solvent vapours from li-ion battery; allowing targeted response and improved situational awareness
- Maintains reliable performance and reduces facility operational cost by minimizing downtime due to nuisance alarms via deploying the Referencing technique
- Delivers lower maintenance cost due to calibration-free sensors, extended sensor life, and simplified bump testing regime

APPLICATIONS

- Stationary Battery Energy Storage
  - Containerized / modular systems
  - Built environment systems
- Data Centers
  - Battery UPS
- Manufacturing
  - Assembly lines
  - Battery formation process
  - Cell aging and EOL testing
  - Module or pack assembly
- Automotive
  - Car parks / garages
  - Charging bays
  - Vehicle test facilities
- Laboratory Safety
  - Environmental chambers
  - Battery abuse testing
- Shipping and Storage
  - Post-manufacturing storage
  - Battery-powered equipment

For further information, please visit: https://www.xtralis.com/product/203/li-ion-tamer-monitoring-system

LI-ION TAMER SENSOR MULTI OUTPUT SOLUTION (LT-MOS)



The Li-ion Tamer Sensor Multi Output Solution (LT-MOS) is a device that detects hydrogen gas, which is generated during thermal runaway of lithium-ion batteries. The detection of hydrogen allows proper management of flammable gas accumulation to avoid explosive conditions. It is also capable of detecting the initial venting of battery electrolyte solvent vapours (off-gassing phase) that occurs early in the failure mode of lithium-ion batteries. The early detection of such events allows proper mitigation steps to be taken to avoid a catastrophic thermal runaway failure.

The LT-MOS is designed to be plug-and-play, easy to install and consists of two primary components, (1) off-gas sensor, (2) interface module.

- Off-gas sensor comprises on-board detection algorithms making it acutely sensitive to lithium-ion battery electrolyte solvent vapours, does not require calibration, is compatible with all forms of lithium-ion battery form factors and chemistries and has a lifetime comparable to a typical lithium-ion battery system.
- Off-gas sensor connects to the interface module providing 3 relay outputs and Modbus/ CANBus serial outputs that can be used to electrically isolate the battery system and activate the ventilation system.

FEATURES OF LT-MOS

- Early warning of lithium-ion battery failures
- Enable thermal runaway prevention with proper mitigation actions
- Single cell failure detection without electrical or mechanical contact of cells
- Extended product lifetime
- Calibration-free product (only requires bump test)
- Highly reliable output signal
- Low power consumption
- Cost Effective solution for modular Battery Energy Storage Systems (BESS)
- Compatible with all lithium-ion battery form factors and chemistries
- Easy installation
- Independent and redundant perspective on battery health
- Reduction/removal of false positive signals
- Support 2 alarm relay outputs and 1 fault relay output
- Configurable communication protocols including Relay outputs and Modbus/Canbus selection communication

APPLICATIONS

- Stationary Battery Energy Storage
  - Small footprint BESS installations (modular cubes, single battery racks, etc.)
- Data Centers
  - Battery UPS
- Manufacturing
  - Assembly lines
  - Battery formation process
  - Cell aging and EOL testing
  - Module or pack assembly
- Automotive
  - Vehicle test facilities
- Laboratory Safety
  - Environmental chambers
  - Battery abuse testing
- Shipping and Storage
  - Post-manufacturing storage
  - Battery-powered equipment

For further information, please visit: https://xtralis.com/product/267/li-ion-tamer-sensor-multi-output-solution

OSID - OPEN AREA SMOKE IMAGING DETECTORS

SMOKE IMAGING TECHNOLOGY

OSID stands for Open-area Smoke Imaging Detector. OSID provides reliable, cost-effective smoke detection for open spaces where fire detection presents unique challenges and where very early warning is not always the priority.

The part that makes OSID unique is the use of a CMOS imager versus the use of a single photo receiver found in all traditional beams detectors. A CMOS imager is equivalent to hundreds of thousand photoreceivers and is the core of the high resistance to false alarms and faults from building movement, object intrusion and sunlight saturation.

Furthermore, the CMOS imager is instrumental for the fast and simple alignment and set-up of the imaging beams.

OSID offers two different solutions.



- **OSID-DE**
  OSID-DE combines dual frequency (IR and UV) beams with a CMOS Imager detector to gain excellent resistance to dust, reflections and object intrusion. This besides that one type Imager (receiver) can have up to seven emitters, providing easy 3D coverage for atria, domes etc. and another type can detect up to 150m (490ft.)

  To support Service, OSID-DE has an on-board log memory and comes with a software that can run on a standard laptop for diagnostic purposes.

  OSID-DE is typically deployed in challenging environments and areas with little free field of view.
- **OSID-R**
  OSID-R, is a single wavelength (IR) reflective beam with a CMOS Imager detector.

  The unit features a unique intuitive mechanism for extremely fast alignment and set-up as well as automatic sensitivity setting. The electronic simulated smoke test from ground level allows fast and reliable smoke and communication path integrity testing.

  This range comes with a conventional and intelligent range of detectors.

  OSID-R is typically deployed in structurally challenging but clean environments.

PHOTOCELL TECHNOLOGY

This range of detectors is single wavelength (IR) reflective beams with a photocell receiver.

The detectors, in addition to the four standard sensitivity selections, have two Acclimate settings. When either of these settings is chosen, the detector will automatically adjust its sensitivity using advanced software algorithms to select the optimum sensitivity for the environment.

This range is typically deployed for short(er) distances in benign and clean environments.

BEAM APPLICTIONS

- Shopping Malls
- Long Corridors
- Heritage Buildings
- Hotel and Office-tower Atriums
- Exhibition and Convention Centers
- Indoor Stadiums and Arenas
- Airport Terminals and Train Stations
- Suspended Ceilings
- Churches and Cathedrals
- Industrial and Manufacturing Facilities

For further information, please visit:

www.xtralis.com/p.cfm?s=22&p=459

https://www.systemsensoreurope.com/

xtralis®

SYSTEM SENSOR®

AGILE™ STAY CONNECTED, STAY PROTECTED



AGILE™ STAY CONNECTED, STAY PROTECTED

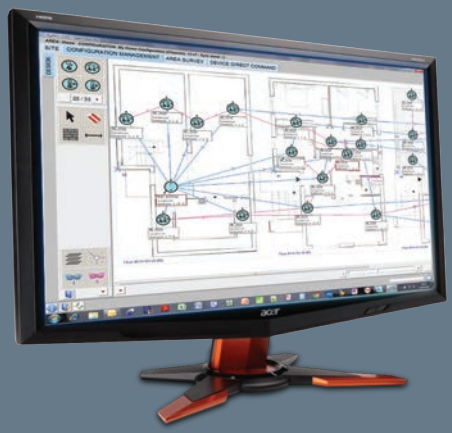
The new Agile Wireless Fire Detection system offers unmatched levels of communication reliability and installation flexibility. Agile provides a robust and efficient method of delivering an integrated smoke detection solution across a wider variety of applications, with greater simplicity and scalability.

HOW AGILE WORKS

The platform is built on a powerful mesh technology, with multiple communication paths to minimize interference and maximize system robustness. An Agile Wireless fire detection system offers the highest levels of communication reliability due to patented mesh network technology.

Mesh technology provides multiple connection paths between each transmitter and receiver allowing continuous, bidirectional communication. If a connection path is broken, the mesh network automatically re-routes the signal, providing a secure and uninterrupted network.

The ability to switch between as many as 18 radio channels and two antennas per device along with an extended communication range provides greater tolerance to interference, improving overall system robustness.



KEY REASONS TO CHOOSE AGILE WIRELESS FIRE DETECTION WITH MESH TECHNOLOGY

- Mesh Network: Multiple communication paths guarantees uninterrupted communications.
- Wireless Monitoring: Visual network representation for easier troubleshooting.
- Installation Flexibility: Enables easy installation of system extensions or temporary systems.
- Smart Battery Monitoring: Accurate service life prediction.
- Communication Range: Provides more margin against interference.

AGILE SOLUTIONS

- Agile Optical Detector
- Photo + Thermal + IR detector
- Thermal detectors
- Waterproof IP67 call point
- Sounder
- Remote indicator
- Gateway
- Repeater

WIRELESS FIRE DETECTION APPLICATIONS

- Hard-to-Wire Buildings
- Refurbishments & Retrofits
- Re-layout Office Buildings
- Temporary Fire Protection
- Time Pressured Projects
- Listed Buildings
- Suspended Ceilings
- Challenging Logistics

For further information, please visit:

https://www.systemsensoreurope.com/

SYSTEM SENSOR®

ABOUT XTRALIS



Xtralis is a leading global provider of powerful solutions for very early & reliable detection of smoke, fire, and gas threats. Our technologies prevent disasters by giving users time to respond before life, critical infrastructure or business continuity is compromised.

We protect highly valuable and irreplaceable assets and infrastructure belonging to the world's top governments and businesses.

TO LEARN MORE, PLEASE VISIT US AT WWW.XTRALIS.COM