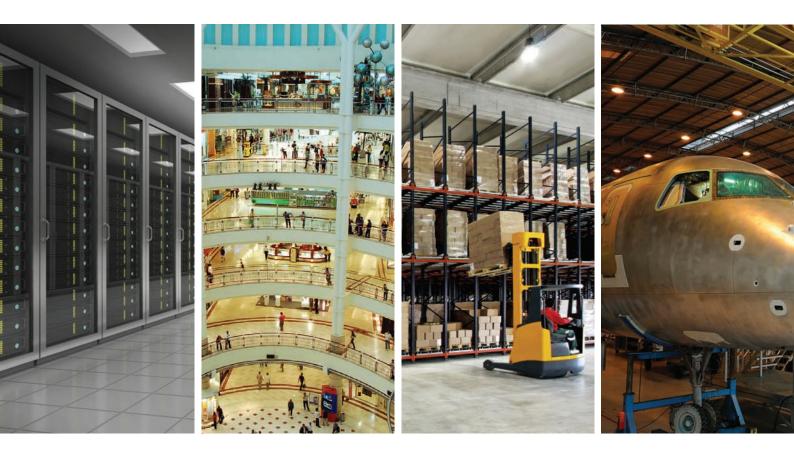


Safety Solutions Product Catalogue (US)



www.xtralis.com

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About Xtralis

Xtralis is the leading global provider of powerful solutions for the early and reliable detection and remote visual verification 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 high-value and irreplaceable assets belonging to the world's top governments and businesses.

Xtralis has been a pioneer in life safety innovations for more than 30 years. We are the world's largest manufacturer of very early warning aspirating smoke detection (ASD) systems, including VESDA, the world's leading ASD brand. With more than 230 patents (granted or pending) and numerous firsts and innovations in our technology portfolio, Xtralis leads the market in very early warning fire detection (VEWFD).

The award-winning Xtralis portfolio includes:

- VESDA-E Aspirating Smoke Detection (ASD)
- VESDA Aspirating Smoke Detection (ASD)
- Industrial VESDA VLI ASD for Industrial Applications
- OSID Open-area Smoke Detection

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6500 Beam Detection

Learn more: www.xtralis.com

Safety Products

Xtralis is the inventor and pioneer of VESDA aspirating smoke detection (ASD) technology and remains the world's leading supplier of ASD systems. Top governments and businesses around the globe rely on Xtralis for technically superior life safety solutions to protect people, critical infrastructure and high-value or irreplaceable assets.

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; 15 times better than current VESDA models with double the longevity, improved dust rejection, and 8% less power consumption per unit area. VESDA-E brings precision addressability to ASD with flexible tubing up to 120 holes per system. Other advanced features, including StaX expansion modules, add capabilities like gas detection for enhanced detection and monitoring; connectivity from WiFi to Ethernet and smart devices, and remote field programmability. VESDA-E is the most advanced, reliable, and flexible ASD system ever.

Very Early Warning Smoke Detection

Xtralis provides highly reliable smoke detection at the earliest presence of fire while discriminating against false alarms. Conventional fire detection does not offer adequate protection because toxic smoke can begin to spread, and fire damage can occur before a warning is issued. In contrast, Xtralis' VESDA aspirating smoke detection (ASD) systems continuously sample the air for the smallest traces of smoke to provide valuable time to understand a threat and stage an intelligent response. Our powerful 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 offers more than just fire detection solutions. Our VESDA ASD systems can be extended to include gas detection and environmental monitoring. VESDA Sensepoint XCL is a gas detection solution that utilizes the ASD pipe network to deliver superior gas detection via multiple hole (multi-point) sampling. The combined solution provides reliable detection of gases for occupant protection and process monitoring whilst simultaneously ensuring protection against fire threats.

The Li-ion Tamer Rack Monitor system is a gas detection solution that enhances the safety of lithium ion battery installations. It provides an alert to "off- gas" events that occur early in the failure mode of li-ion batteries well in advance of smoke detection and traditional LFL gas detectors. Early warning of off-gas events enables proper mitigation steps to be taken to avoid progression to a catastrophic thermal runaway failure.

Open-area Smoke Detection

Fire detection for buildings with open spaces presents unique challenges, and very early warning may not always be the priority. When only standard sensitivity detection is required, Open-area Smoke Imaging Detection (OSID) by Xtralis offers the most reliable and cost-effective smoke detection solution for open spaces. It delivers superior performance to overcome all of the shortcomings inherent to other detection systems currently used in these applications such as beam, heat and flame detectors.

Choose the Right Product for your Segment and Application

Coverage			2000m²			1000m²	500m²	250m²	2000m ²	
Detection	UVEW	AEW	VEW	AVEW	IVEW	VEW	VE	ew .	Beam	PIAB
Product	VEU	VEA	VEP-4	VES	VLI	VEP-1	VI	LF	OSID	XAS
IT and Communications										
Clean Room										
Highrise and Residential										
Manufacturing										
Airport										
Railway										
Logistics / Warehouse										
Logistics / Cold Storage										
Correctional Facilities										
Cultural and Heritage										
Power										
Retail and Commercial										
Oil and Gas										
Sporting Venues										
Education										
Waste Recycling										
Mining										

Vertical Market

	Coverage			2000m ²			1000m²	500m²	250m²	2000m²	
	Detection	UVEW	AEW	VEW	AVEW	IVEW	VEW	VE	EW	Beam	PIAB
	Product	VEU	VEA	VEP-4	VES	VLI	VEP-1	V	LF	OSID	XAS
	Waste Recycling										
	Mining										
	Void Protection										
	Return Air										
	Cabinet Protection										
c	Duct Detection										
Aplication	Tunnel (cable or other)										
5	Lift Shaft										
2	Small Computer Room										
ι.	Open Area Protection										
	Harsh Environment										
	Control Room										
	Switch Room										
	Restricted Access Room										
	In-Rack										
	Conveyor										
	Special Hazard (CL 1 DIV 2)										
	Car Parks (underground)										
	Very Early Warning Smoke Detection	1								·	
	Ultra Very Early Warning Smoke Detection	-									
	ona vory Larry warning onloke Detection										

VEW	Very Early Warning Smoke Detection
UVEW	Ultra Very Early Warning Smoke Detection
AVEW	Addressable Very Early Warning Smoke Detection
IVEW	Inudstrial Very Early Warning Smoke Detection
AEW	Addressable Early Warning Smoke Detection
PIAB	Point-In-A-Box

VESDA Models Comparison Chart

			VE	SDA-E		VESDA	VESDA Industrial Products
Features	VEP		EP				
	VEU	VEP-1	VEP-4	VES	VEA	VLF 250/500	VLI
Pipes and area coverage							
Pipe Length (Linear)	400 m (1.312 ft)	100 m (328 ft)	280 m (919 ft)	280 m (919 ft)	40 x 100 m (40 x 328 ft)	25/50 m (82/164 ft)	360 m (1.181 ft)
Pipe Length (Branched)	800 m (2.624 ft)	130 m (427 ft)	560 m (1.837 ft)	560 m (1.837 ft)	N/A	30/60 m (98/197 ft)	445 m (1.460 ft)
Area Coverage	6.500 m² (69.965 sq ft) *	1.000 m² (10.760 sq ft)	2.000 m² (21.520 sq ft)	2.000 m² (21.520 sq ft)	2.000 m² (21.520 sq ft) 40-120 sample holes	250/500 m² (2.690/5.380 sq ft)	2.000 m² (21.520 sq ft)
No. of Pipe Inlets	4	1	4	4	40 expandable to 120 tubes	1	4
Multiple Pipe Addressability	No	1	lo	Up to 4 sectors	Up to 40	No	No
Sensitivity							
Min Fire 1 Threshold	0.001%obs/m (0.0003%obs/ft)	0.01%obs/m (0.0031%obs/ft)	0.01% obs/m (0.0031 obs/ft)	1.6%obs/m (0.5% obs/ft)	0.025%obs/m (0.008% obs/ft)	0.15%/m (0.046%/ft)
Detection Range	0.001 - 20.0%obs/m (0.0003 - 6.25%obs/ft)	0.005-20%obs/m (0.0016-6.25%obs/ft)		0.005 - 20%obs/m (0.0016% - 6.25% obs/ft)	0.020 - 16%obs/m (0.006 - 4.88%obs/ft)	0.025 - 20%obs/m (0.008 - 6.25%obs/ft)	0.005 - 20.0%obs/m (0.0016 - 6.25%obs/ft)
EN54-20 (Class A / B / C)							
Max. no of Holes	80/80/100	30/40/45	40/80/100	40/80/100 **	40 - 40***	VLF 250 12/12/12 VLF 500 30/30/30	24/28/60
Sensitivity (%obs/m)	1.5/3/8	1.5	5/3/8	1.5/3/8 **	1.6/4/8	1.5/4.5/10	1.5/4.5/10
Transport time (seconds)	70/90/110	60/9	0/110	60/90/90 **	40 - 90 (Tube length dependent)	VLF- 250 60/60/60 VLF- 500 90/90/90	60/90/120
Others							
Hazardous Area Approval (FM Class 1, Div 2, Groups A, B, C, D)	No	Y	'es	Νο	N/A	Yes	Yes
IP Rating	IP40	IP40		IP40	IP40	IP30	IP66
Two Stage Filtration	Yes	Yes		Yes	Yes	Yes	Patented Intelligent Filter Secondary Foam Filter Sub-Sampling Probe
Total Number of Alarm Thresholds	4 (Day/Night)	4 (Day/Night)		32 (Day/Night)	4 (Day/Night)	4 (Day/Night)	4 (Day/Night)
Relay Outputs	7		7	12 7 (Expandable		3 (Expandable to 6)	5
On-board Memory (Max. Events)	20.000	20	.000	20.000	20.000	18.000	18.000

			VES	SDA-E		VESDA	VESDA Industrial Products
Features	VEU	V	EP	VES	VEA	VLF 250/500	VLI
	VEU	VEP-1	VEP-4	VES	VEA	VLF 250/500	VLI
AutoLearn™ (Smoke/Flow)	AutoLearn Smoke AutoLearn Flow		rn Smoke arn Flow	AutoLearn Smoke AutoLearn Flow	No	AutoLearn Smoke AutoLearn Flow	AutoLearn Smoke AutoLearn Flow
Bar Graph / Indicator LED	LEDs or 3.5" Colour Touch Screen	LEDs LEDs or 3.5" Colour Touch Screen		LEDs or 3.5" Colour Touch Screen	LEDs or 3.5" Colour Touch Screen	Local (7 on-board LEDs 10 Segment Circular Display) Remote display when fitted with VESDAnet card	Local (5 on-board LEDs) Remote display for VLI-885
Programming Tools - On-board Programming module - Handheld Programmer - PC Software (VSC, VSM)	Programmed via USB/ Ethernet/ WiFi connection to PC using VSC/VSM4		Programmed via l	JSB/ Ethernet connection to PC using VSC/VSM4		Programmed via RS232 direct connection to PC using VSC or Programmer when VN card is fitted	Local USB configuration port Connection to PC using VSC/VSM4 Programmer for VLI-885
StaX Expandability	Yes	Yes	Yes	Yes	Yes	No	No
VESDAnet™							
Max. No. of devices/ detectors per loop	200/100	200	/100	200/100	200/100	200/100 (with VN Card)	200/100 (VLI-885)
Max. Distance between Devices	1.300 m (4.265 ft)		00 m 65 ft)	1.300 m (4.265 ft)	1.300 m (4.265 ft)	1.300 m (4.265 ft) (with VN Card)	1.300 m (4.265 ft) (VLI-885)
Computer-based Management via VSM	Yes	Ŷ	es	Yes	Yes	Yes	Yes
Remote Relay Modules - 7 relay version - 12 relay version	VRT-500 N/A	VRT-500 N/A		VRT-E00 VRT-900	VRT-500 N/A	VRT-500 N/A	VRT-500 N/A
Compatible Remote Bargraph Displays - Display, 7 relays - Display, 12 relays- Display, no relays	VRT-200 N/A VRT-600	VRT-200 N/A VRT-600		VRT400 VRT-800 VRT-700	VRT-200 N/A VRT-600	VRT-V00 N/A VRT-W00 (with VN Card)	VRT-Q00 N/A VRT-T00 (VLI-885)

* System design and regulatory requirements may restrict the monitoring area to a lesser amount.

** Subject to agency testing.

*** Check local codes for the required transport times determined by the tube lengths

Beam Detectors Comparison Chart

Features	6500	OSID-R	OSID-DE
Beam	Single IR	Single IR	Dual IR/UV
Technology	Reflective	Reflective	End-to-end/Multi-emitter (*)
Distance	100 m/ 328 ft.	100 m/ 328 ft.	200 m/ 656 ft.
Minimum free FOV	40x40cm/80x80 cm (with LRK)	40x40cm	20x20cm
Building movement	+/-0.5°	+/-1°	+/-2°
Resistance to dust	No	No	Yes
Beam trough glass panes	No	No	Yes
Resistance to solid object intrusion	No	Yes (Fault)	Yes (Fault)
Resistance to sunlight saturation	No	Yes (Fault)	Yes (Fault)
Angle of sunlight rejection	10°	10°	-
Log & diagnostics	No	No	Yes
Test at ground level	Yes	Yes	No
IP range	IP54	IP 55	IP45
T° range	-30°C to 55°C	-20 °C to +55	-10 °C to 55 °C
Max. Current	8.5mA Max. (Intl.) 38.5mA (Conv.)	22 mA @ 15 VDC (Intl.) 54 mA @10.2 V (Conv.)	8mA (31 mA alignment)
Voltage range	15-32VDC (Intl.) 10.2 to 32 VDC (Conv.)	15-32VDC (Intl.) 10.2 to 32 VDC (Conv.)	20-30 VDC

* Up to 7 emitters for a an OSI-90 imager

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VESDA-E The Next Generation of VESDA Aspirating Smoke Detectors



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 - up to 15 times greater than VESDA VLP, improved dust rejection, double the longevity while maintaining sensitivity over its lifetime, up to 8% less power consumption per unit area.

- VESDA Flex, future proof expandability and programming for maximum flexibility using, StaX Hardware expansion modules that easily bolt onto the VESDA-E detector to add additional capabilities.
- VESDA Verify, provides situational awareness to improve response time, efficiency and effectiveness by providing up to 120 pinpoint addressability.
- 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, Wi-Fi, USB VESDAnet and Relavs
- 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%.

How VESDA-E Works

Air is continually drawn from the protected area through the air sampling pipe network and into the detector by a high efficiency aspirator. The air sampling pipe network can contain up to four pipes. The air from each sampling pipe passes through an airflow sensor and then a sample of the air is drawn into the smoke detection chamber via the sampling module, after first passing through the filter. An additional filter provides clean air to protect the optical surfaces inside the detection chamber from contamination.

The Flair [™] detection chamber uses the equivalent of 330.000 sensors and sophisticated algorithms for smoke detection and particle classification. If the detected smoke is higher than the set alarm thresholds it is reported as an Alert, Action, Fire1 or Fire2 alarm condition. Air is exhausted from the detector and may be vented back into the protected zone. Alarms can be signaled via Relays and VESDAnet. Ethernet and WiFi can be used for configuration and secondary monitoring, and a USB interface is provided for initial setup. A series of LEDs display Alarm, Trouble, Disable and detector power on status. A button allows the user to Reset or Disable the detector. In addition, an optional 3.5" LCD display shows the detector status, including smoke level and a smoke level bar graph, alarm thresholds, trouble status, % airflow level, normalization status and filter life used.



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

VESDA-E Products List

VESDA-E VEU

. VEDA	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 at least 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.			
Ordering Codes	Description			
VEU-A00	VESDA-E VEU with LEDs, Aluminium Enclosure			
VEU-A10	VESDA-E VEU with 3.5" Display, Aluminium Enclosure			
Approvals: UL, ULC, CSFM, VdS, CE, ActivFire, FM, NF, VNIIPO, CCC, EN 54-20, ISO 7240-20 (Class C (100 holes), Class B (80 holes), Class A (80 holes))				

Dimensions: 350 x 225 x 135 mm (13.8 x 8.9 x 5.3 in)

Weight: VEU-A00 - 4.83 kg (10.6 lbs), VEU-A10 - 4.9 kg (10.8 lbs)

Area Coverage: 6.500 m² (69.965 ft²)*

* System design and regulatory requirements may restrict the monitoring area to a lesser amount

VESDA-E VEP

NOR -	The VESDA-E VEP series of smoke detectors bring the latest and most advanced detection technology to provide very early warning and the best nuisance alarm rejection to a wide range of applications. Built on the Flair detection technology and years of application experience, VEP detectors deliver absolute calibration for lifetime performance and a range of revolutionary new features that deliver user value.				
Ordering Codes	Ordering Codes Description				
VEP-A00-1P	VESDA-E VEP with LEDs, 1 pipe, Plastic Enclosure				
VEP-A00-P	VESDA-E VEP with LEDs, 4 pipe, Plastic Enclosure				
VEP-A10-P VESDA-E VEP with 3.5" Display, 4 pipe, Plastic Enclosure					
Approvals: UL, ULC, CSFM, FM, ActivFire, CE, VdS, NF, VNIIPO, CCC, EN 54-20, ISO 7240-20					
Dimensions: 350 x 225 x 135 mm (13.8 x 8.9 x 5.3 in)					
Weight: VEP-A00-1P: 4.4 kg (9.7 lbs), VEP-A00-P: 4.4 kg (9.7 lbs), VEP-A10-P: 4.5 kg (9.9 lbs)					
Area Coverage: VEP-1P an	d VEP-P: 1.000 m² (10.760 ft²), VEP-P: 2.000 m² (21.520 ft²)				

VESDA-E VES

	-
1.000	VISON B

The VESDA-E VES includes a valve mechanism in the inlet manifold and software to control the airflow from four Sectors (pipes). This configuration enables a single zone to be divided into four separate sectors. The VES enables the user to locate the source of smoke by identifying the first sector to reach the Alert level. The detector then continues to sample from all sectors to monitor fire growth and will report separate alarm levels for each sector. The VES provides four individually configurable alarm levels (Alert, Action, Fire 1 and Fire 2) for each sector allowing optimum protection in a wide range of applications.

Ordering Codes	escription				
VES-A00-P	VESDA-E VES with LEDs, Plastic Enclosure				
VES-A10-P	VESDA-E VES with 3.5" Display, Plastic Enclosure				
VES-A00-P-NF	VESDA-E VES with LEDs, Plastic Enclosure - NF				
VES-A10-P-NF	VESDA-E VES with 3.5" Display, Plastic Enclosure - NF				
Approvals: UL, ULC, CSFM, ActivFire, VdS, EN 54-20, ISO 7240-20					
Dimensions: 350 x 225 x 135 mm (13.8 x 8.9 x 5.3 in)					
Weight: VES-A00-P: 4.7 kg (10.4 lbs), VES-A10-P: 4.8 kg (10.6 lb)					
Area Coverage: 2.000 m² (21.520 ft²)					

VESDA-E VEA					
. WERK 2	The VESDA-E VEA series of detectors combine VESDA reliability and early warning smoke detection with pinpoint addressability and a variety of annunciation options that truly surpass traditional spot detectors. VEA uses patented sampling points and multi-channel microbore air-sampling with enhanced or standard alarm sensitivity setting for the sampling points. As a multi-channel addressable system, the VEA detector is able to divide a protected space into sampling locations, enabling the localization of a fire for faster incident response. VEA is suitable for the protection of areas where pinpoint location of fire events is essential, thus providing ideal fire detection solutions for offices, hospitals, schools, prisons, multi-story dwellings, cabinets in data centers and warehouse racks. A wide range of features provide flexibility, enhanced connectivity and reduced total cost of ownership.				
Ordering Codes	Description				
VEA-040-A00	VESDA-E VEA-40 Detector with LEDs				
VEA-040-A10	VESDA-E VEA-40 Detector with 3.5" Display				
Approvals: UL, ULC, CSFM, FM, ActivFire, CE, VdS, EN 54-20, ISO 7240-20: Class A, B and C					
Dimensions: 352 x 336 x 135.5 mm (13.9 x 13.2 x 5.33 in)					
Weight: VEA-040-A00: 9.9 kg (21.8 lbs), VEA-040-A10: 10 kg (22.2 lbs)					
Area Coverage: 2.000 m ² (2	21.520 ft²)				

Note: VEA detector, tubes, and sampling points work as a complete system, it is mandatory to use the VEA microbore tubes and sampling points with VEA detectors.

VESDA-E VEA 40-Relay Local StaX							
	The VESDA-E VEA Local Relay StaX allows signaling of alarm location from the detector via relays and provides mounting of fire panel loop input modules inside the enclosure.						
Ordering Codes	Description						
VER-A40-40-STX	VESDA-E VEA 40-Relay Local StaX						
Approvals: • UL • ULC • EN 54-20 • Major agency approv	als pending.						
Dimensions: 352.05 mm x 340.5 mm x 135.5 mm (13.9 in x 13.4 in x 5.3 in)							
Weight: 5.1 kg (11.22 lbs)							

VESDA-E Accessories List

VESDA-E VEA Accessories

Product Name and Image	Ordering Code	Description				
	VSP-970	VESDA-E VEA-40 Mounting Bracket				
	VSP-971	VESDA-E VEA-40 Smoke Sensor Module				
	VSP-972	VESDA-E VEA Filter (single cartridge)				
and the second sec	VSP-973	VESDA-E VEA Pump				
	VSP-974	VESDA-E VEA Rotary Valve				
UNITED A	VSP-975	VESDA-E VEA LED Front Panel				
I CII	VSP-976	VESDA-E VEA 3.5" Display Front Panel				
	VSP-977	VESDA-E VEA Filter (Pack of 10)				
Contraction of the second	VSP-978	VESDA-E VEA Sample Point Head Removal Key (Pack of 10)				
	VSP-979	VESDA-E VEA Microbore Tube Cutter (Pack of 3)				
	VSP-980-ST	VESDA-E VEA Stainless Steel Sample Point				
	VSP-1007	VESDA-E VEA VSP-980-ST Sample Point Installation Tool (Pack of 5)				
	VSP-1008	VESDA-E VEA VSP-980-ST Sample Point Duct Kit				

Product Name and Image	Ordering Code	Description
	VSP-980-W	VESDA-E VEA 6mm Standard Sampling Point
	VSP-980-W22	VESDA-E VEA 6mm Standard Sampling Point (Pack of 22)
	VSP-981-W	VESDA-E VEA 4mm Standard Sampling Point
	VSP-981-W22	VESDA-E VEA 4mm Standard Sampling Point (pack of 22)
	VSP-980-B	VESDA-E VEA 6mm Black Sampling Point
1111111111111	VSP-980-B22	VESDA-E VEA 6mm Black Sampling Point (pack of 22)
	VSP-981-B	VESDA-E VEA 4mm Black Sampling Point
	VSP-981-B22	VESDA-E VEA 4mm Black Sampling Point (pack of 22)
	VSP-982-W	VESDA-E VEA 6mm Surface Mount Sampling Point
	VSP-982-W22	VESDA-E VEA 6mm Surface Mount Sampling Point (pack of 22)
	VSP-983-W	VESDA-E VEA 4mm Surface Mount Sampling Point
	VSP-983-W22	VESDA-E VEA 4mm Surface Mount Sampling Point (pack of 22)
	VSP-982-B	VESDA-E VEA 6mm Surface Mount Black Sampling Point
	VSP-982-B22	VESDA-E VEA 6mm Surface Mount Black Sampling Point (pack of 22)
	VSP-983-B	VESDA-E VEA 4mm Surface Mount Black Sampling Point
	VSP-983-B22	VESDA-E VEA 4mm Surface Mount Black Sampling Point (pack of 22)
	VSP-990-330	VESDA-E VEA 6mm Microbore Tube UL-compliant Plenum- rated (330ft)
	VSP-991	VESDA-E VEA 4mm Microbore Tube UL-compliant Plenum- rated, 500 ft
	VSP-998	VESDA-E VEA 6mm Blanking Plug (pack of 50)
	VSP-1000	VESDA-E VEA 6mm to 4mm Reducer (pack of 10)
	VSP-1001	VESDA-E VEA 6mm to 6mm Straight Union (pack of 10)
	VSP-1002	VESDA-E VEA 4mm to 4mm Straight Union (pack of 10)
	VSP-1003	VESDA-E VEA 6mm to 6mm Right Angle Joiner (pack of 10)
	VSP-1004	VESDA-E VEA 4mm to 4mm Right Angle Joiner (pack of 10)

VESDA-E VEU/VEP/VES Accessories

Product Name and Image	Ordering Code	Description					
	VSP-955	VESDA-E VES Scanner Manifold Spare					
	VSP-960	VESDA-E Mounting bracket					
	VSP-961	VESDA-E Exhaust Adaptor US					
7	VSP-962	VESDA-E VEU/VEP/VES Filter (single cartridge)					
	VSP-962-20	VESDA-E VEU/VEP/VES Filter (pack of 20 cartridges)					
	VSP-963	VESDA-E Aspirator					
	VSP-964	VESDA-E Smoke Detection Chamber					
	VSP-964-03	VESDA-E Smoke Detection Chamber - MK3					
	VSP-965	VESDA-E Sampling Module					
· VESA	VSP-966	VESDA-E VEU-A00 Front Cover with LEDs					
· Vesta :	VSP-967	VESDA-E VEU-A10 Front Cover with 3.5" Display					
VISA	VSP-968	VESDA-E VEP-A00-P/1P Front Cover Plastic with LEDs					

Product Name and Image	Ordering Code	Description
VISON	VSP-969	VESDA-E VEP-A10-P Front Cover Plastic 3.5" Display
	VSP-969-S	VESDA-E VES-A10-P Front Cover Plastic (3.5" Display)

VESDA-E Demo Kits

Ordering Code	Description
VKT-800	VESDA-E VEU Demo Kit
VKT-850	VESDA-E VEP Demo Kit
VKT-855	VESDA-E VES Demo Kit
VKT-900	VESDA-E VEA Demo Kit

Batteries and Power Supplies

VESDA-E VEA Power Supply

	VPS-VEA-115UL	VPS-VEA-230UL						
	¢ xtrais							
Nominal AC Supply Voltage	120VAC/2.0A/60Hz	230VAC/1.0A/50Hz						
Output Current	27VDC/2.8A Continuous 27VDC/5A Alarm 438 mm x 330 mm x 142 mm (17.25 in. x 13 in. x 5.6 in.)							
Dimensions								
(H x W x D)								
Weight	5.9Kg (13lbs) without batteries							

VESDA Aspirating Smoke Detection



The World's leading 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 warnings, even minute levels of smoke can be detected before a fire has time to escalate. As the leading 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.

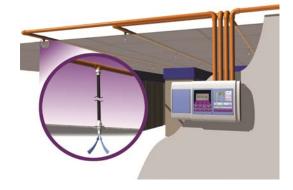
Applications

- Accommodation (Apartments, Hotels, Shops and Offices)
- Correctional Facilities
- Clean Rooms
- Cold Storage
- Cultural/Heritage
- Data and Telecom
- · Hospitals and Healthcare
- Insurance

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).



- Marine
- Nuclear Facilities
- Oil and Gas
- Portable Switch Rooms
- Power Generation
- Records Storage
- Transportation
- Wind Power Generation
- · Warehousing

VESDA Products List

A very early warning smoke detector designed to protect small, business-critical							
environments of less than 250 m² (2,690 ft²).							
Description							
VESDA VLF.							
VESDA VLF Siemens version							
Approvals: UL, ULC, FM Class I Div II, ActivFire, CE, LPCB, VdS, VNIIPO, NF,EN 54-20 (Classes A (12 holes), B (12 holes), C (12 holes)), CCC. UL 94V0, NF F16-101, DIN 5510-2, EN 50155, SIL 2 as per IEC 61508 (2010) only for Rail Applications							
Dimensions: 256 x 183 x 92 mm (10 x 7 x 3 in)							
Weight: 2 kg (4.4 lbs)							

Area Coverage: 250 m² (2,690 ft²)

VESDA VLF-500						
E REAL REAL	A very early warning smoke detector designed to protect small, business-critical environments of less than 500 m² (5,380 ft²)					
Ordering Codes	Description					
VLF-500-00	VESDA VLF.					
VLF-500-SIE	VESDA VLF Siemens version					
Approvals: UL, ULC, FM Class I Div II, ActivFire, CE, LPCB, VdS, VNIIPO, NF,EN 54-20 (Classes A (30 holes), B (30 holes), C (30 holes)), CCC UL 94V0, NF F16-101, DIN 5510-2, EN 50155, SIL 2 as per IEC 61508 (2010) only for Rail Applications						
Dimensions: 256 x 183 x 92 mm (10 x 7 x 3 in)						
Weight: 2 kg (4.4 lbs)						
Area Coverage: 500 m² (5,380 ft²)						

VESDA VLI

VESDA VU sees	The VESDA VLI is an industry first early warning aspirating smoke detection system, designed to protect industrial applications up to 2.000 m ² (21.520 ft ²). The VLI detector combines a patented fail-safe Intelligent Filter with Clean Air Zero and clean- air barrier for optics protection complementing absolute detection and providing longer detection chamber life all enclosed in a robust IP66-rated enclosure.					
Ordering Codes	Description					
VLI-880	VESDA VLI Detector					
VLI-885	VESDA VLI with VESDAnet					
Approvals: UL, ULC, FM, ActivFire, CE, VdS, LPCB, NF, SIL 2 as per IEC 61508, EN 54-20 (Class A (24 holes), Class B (28 holes), Class C (60 holes))						
Dimensions: 426.5 x 316.5 x 180 mm (16.8 x 12.5 x 7.1 in)						
Weight: 6.035 kg (13.3 lbs)						
Area Coverage: 2.000 m² (21.520 ft²)						

VESDA Discontinued Products List

VESDA VLP								
	Central element of the ASD product range. VESDA VLP is classed as a "Very Early Warning Smoke Detector", which means that it detects fire at the earliest possible stage and reliably measures very low to extremely high concentrations of smoke. Has an alarm sensitivity range of 0.005%–20% obs/m (0.0015%–6.25% obs/ft). All detectors include a head termination card with 7 relays (HTC7) and a socket.							
Ordering Codes		e ordering code for mponents of the de				X X. The below table exp s:	lai	ns the available
	Х		Х		Х		Х	
	0	Blank plate	0	Blank plate	0	Blank plate	0	Standard detector orientation
VLP	4	FOK: Fire 1 Alarm	1	Programmer mounted in the middle	1	Programmer mounted in the far right position	1	Inverted Detector
		and OK (FOK) LEDs		Display mounted in the middle	2	Display mounted in the far right position	1	Orientation
Standard ordering	coc	les:						
VLP-002		P detector with two. e Display module is		•		dard Display module. t position.		
VLP-012		P detector with a ce odule.	ent	rally mounted LCD	Pr	ogrammer module and a	a S	tandard Display
VLP-400		P detector only enc. e plate in the far lef				olates. Alarm and OK (FOK) LE	Ds	6.
Note:								
Not all combina	tio	ns can be ordered.						
Approvals: UL, ULC, CSFM, FM, ActivFire, CE, CPR, LPCB, VdS, VNIIPO, CFE, NF, EN 54-20 (Class A (30 holes), Class B (60 holes), Class C (100 holes)), UL268A (in-duct application), NY-MEA								
Dimensions:350 x 2	225	5 x 125 mm (13.8 x 8	3.9	x 4.9 in)				
Weight: 4.0 kg (9 lbs	s) iı	ncluding Display an	d l	Programmer modul	es			
Area Coverage: 2.0	000	m² (21.520 ft²)						

VESDA VLS

Ordering Codes



Similar to the standard VESDA VLP detector, but also includes a valve mechanism in the inlet manifold and software to control the airflow from the four sectors (pipes). This configuration enables a single VESDA zone to be divided into four separate sectors.

All detectors include a head termination card with 7 or 12 relays and a socket.

The ordering code for VESDA VLS is VLS-XXX XX. The below table explains the available components of the detector and their positions:

	Х		Х		Х		Х		
	2	7 Relay Version	0	Blank plate	0	Blank plate		Standard detector orientation	
VLS	3	12 Relay Version	1	Programmer mounted in the middle	1	Programmer mounted in the far right position		Inverted Detector Orientation	
	6	7 Relay w/FOK LED	4	Scanner display mounted in the	4	Scanner display mounted in the far right position	1		
	7	12 Relay w/FOK LED	4	mounted in the middle	4				
Standard ordering codes:									
VLS-204	VLS detector with two blank plates and a SCANNER Display module. The Display module is mounted in the far right position. 7 Relay version.								
VLS-214	VLS detector with a centrally mounted LCD Programmer module and a SCANNER Display module. 7 Relay version.								
VLS-304	VLS detector with two blank plates and a Scanner Display module. The Display module is mounted in the far right position. 12 Relay version.								
VLS-314	VLS Detector with a centrally mounted LCD Programmer module and a Scanner Display module. 12 Relay version.								
VLS-600 VLS detector only enclosure with three blank plates. The plate in the far left position includes FIRE 1 Alarm for any sector and OK (FOK) LEDs. 7 Relay version.									
VLS-700	VLS detector only enclosure with three blank plates. The plate in the far left position includes FIRE 1 Alarm for any sector and OK (FOK) LEDs. 12 Relay version.								
Note:									
Not all combinations can be ordered.									
Approvals: UL_ULC_CSEM_EM_ActivEire_CE_CPR_LPCB_V/dS_V/NIIPO_NE_EN_5/4-20 (Class A (40 boles)									

Approvals: UL, ULC, CSFM, FM, ActivFire, CE, CPR, LPCB, VdS, VNIIPO, NF, EN 54-20 (Class A (40 holes), Class B (40 holes), Class C (60 holes)), UL268A (in-duct application), NY-MEA, CCC

Dimensions: 350 x 225 x 125 mm (13.8 x 8.9 x 4.9 in)

Weight: 4.0 kg (9 lbs) including Display and Programmer modules

Area Coverage: 2.000 m² (21.520 ft²)

VESDA VLC			
· · · · · · · · · · · · · · · · · · ·	Specifically designed to provide all the benefits of aspirating smoke detection, including very early warning, in single environment medium areas and where space is a premium. The VLC combines the well-proven detection technology with a modified aspirator design, and incorporates them into a compact enclosure with a simplified display.		
Ordering Codes	Description		
VLC-500	VESDA VLC Relay Only Version, 3 levels of Alarm provided, adjustable sensitivity. Directly programmable with Xtralis VSC software via a serial link connection.		
VLC-505	The VN version utilises VESDA Programmers including Hand Held, Remote Mount, Rack Mount versions or PC Link HLI connected to a PC running Xtralis VSC/Xtralis VSM4 software.		
Approvals: UL, ULC, CSFM, FM, ActivFire, CE, CPR, LPCB, VdS, VNIIPO, NF, EN 54-20 (Class A (30 holes), Class B (36 holes), Class C (40 holes)), UL268A (in-duct application), NY-MEA, CCC			
Dimensions: 225 x 225 x 85 mm (8.85 x 8.85 x 3.34 in)			
Weight: 1.9 kg (4.2 lbs.)			
Area Coverage: 800 m² (8,610 ft²)			

VESDA VLC Marine	
	The VESDA VLC Marine by Xtralis is a tested and certified aspirating smoke detector for use in marine environments. The VESDA VLC Marine aspirating smoke detector is available in two versions, one that interfaces via relays only (RO) and one that interfaces via relays and VESDAnet (VN).
Ordering Codes	Description
VLC-50000-MRN	VLC - Marine RO
VLC-50500-MRN	VLC - Marine VN
Approvals: • UL • DNV Type Approval ce • DNV Location classes:	

Temperature (D), Humidity (B), Vibration (A), Electromagnetic Compatibility (B), Ingress protection (IP30) or (IP66) with optional enclosure.

• Environmental tests have been performed according to Lloyd's Register Specification 1 (2002) for environmental categories ENV1, ENV2, and ENV3.

Dimensions: 225 x 225 x 85 mm (8.85 x 8.85 x 3.34 in)

Weight: 1.9 kg (4.2 lbs.)

Area Coverage: 800 m² (8,610 ft²)

VESDA Accessories List

Remote Mount Configuration (VRT) - Single Box

Product Image	Ordering Code	Description	
	VRT-100	Programmer. Includes remote termination card with no relays.	
	VRT-200	VESDA VLP with a remote termination card. Display. 7 Relays	
	VRT-600	VESDA VLP with a remote termination card. Display. No Relays	
	VRT-400	VESDA VLS Display with a remote termination card. 7 Relays	
	VRT-700	VESDA VLS Display with a remote termination card. No Relays	
	VRT-800	VESDA VLS Display with a remote termination card. 12 Relays	
	VRT-W00	VESDA VLF Display with a remote termination card. No Relays	
	VRT-V00	VESDA VLF Display with a remote termination card. 7 Relays	
	VRT-J00	VESDA VLC Display with a remote termination card. 7 Relays	
	VRT-K00	VESDA VLC Display with a remote termination card. No Relays	
	VRT-T00	VESDA VLI Display with a remote termination card. No Relays	
	VRT-Q00	VESDA VLI Display with a remote termination card. 7 Relays	
	VRT-300	For remote connection to the VESDAnet.	
	VRT-500	Includes blank plate with a remote mounting box. 7 Relays version for VLP, VLF, or VLC	
	VRT-E00	Includes blank plate with a remote mounting box. 7 Relays version for VLS	
	VRT-900	Includes blank plate with a remote mounting box. 12 Relays version for VLS	
	VRT-S07	A remote termination card with new software supplied in a remote mounting box (VRT); it allows reporting of ANY alarm or fault condition that appears on a VESDAnet loop regardless of the initiating zone.	
	VRT-J0000-MRN	Remote Display – VESDA VLC Marine	

Note: All configurations include the remote mounting box, and are identifiable from a standard remote mounting box by the text on the blue cover. They can also be distinguished by the part number on the ratings label that appears on the bottom of the unit.

Detector and Subrack Enclosures

Product Name and Image	Ordering Code	Country	Description
Sub Rack Enclosure	VRE-100	US	Glass door enclosure for 19" sub rack. Fits up to three racks, or two racks with VESDA Power Supply. Blank plates, the length of a subrack (19") are used for empty slots.

Sub Rack Configurations (VSR)



The VESDA Sub Rack can be configured in thousands of different ways.

To configure, choose a module for each of the four positions shown below. The modules will be assembled in the configuration you specify, from left to right. Position 1 is the far left position, while Position 4 is the far right. The Sub Rack mounts on any standard 19" rack. Sub rack enclosures are also available.

Sub Rack configurations include the options for both "front" and "back" modules.

- Front module: is a display, programmer, or VESDAnet socket.
- Back modules: are remote termination cards with a variety of relay options.

To configure your Sub Rack, use the matrix that follows.

The "Empty" Sub Rack: VSR - 0000 is a 19" Sub Rack without remote modules. Once modules are added, the part number will change as appropriate. VSR - 0000 has four positions for modules. Select a module for each position from the matrix below.

Pre-configured examples:



VSR - 2100: 19" Sub Rack with 1 Standard Display with 7 - relay remote termination card in position 1 and a Programmer in position 2. Blank plates are in position 3 and 4.

VSR - 4423: 19" Sub Rack with: 2 Scanner Displays with 7 - relay remote termination cards in positions 1 and 2. A Standard Display with 7 - relay remote termination card occupies position 3 and a VESDAnet Socket is in position 4.

VSR Spare Modules

- 1. All programmers and displays require remote termination cards.
- 2. Every relay termination card requires a display or relay processor board.
- 3. If you are using the sub rack for remote relays only, you must have a relay processor board in each position that has a relay.

Ordering Code	Description
VSR-1	Programmer with remote termination card - no relays
VSR-2	Standard display with 7 relay remote termination card
VSR-3	VESDAnet Socket
VSR-4	Scanner display with 7 relay remote termination card
VSR-5	7 relay remote termination card and relay processor
VSR-6	Standard display with remote termination card - no relays
VSR-7	Scanner display with remote termination card - no relays
VSR-8	Scanner display with 12 relay remote termination card
VSR-9	12 relay remote termination card and relay processor
VSR-A	Programmer sharing adjacent termination card
VSR-J	VLC VN Display with 7 relays
VSR-K	VLC VN display with no relays
VSR-Q	VLI display with 7 relays
VSR-T	VLI display with no relays
VSR-V	VLF display with 7 relay remote termination card
VSR-W	VLF display without relays

VESDAnet and Relay Cards

Product Name and Image	Ordering Code	Description	
VESDAnet Network Interface Card	VIC-010	A simple interface card for the range of VESDA VLF smoke detectors. The VN Card provides seamless VESDAnet communication from the detector to other VESDAnet devices, including configuration and monitoring tools.	
VESDAnet multi-function Control Card	VIC-020	Provides additional 2 relays and 1 General Purpose Output (GPI). For VESDA VLF	
VESDAnet Network Interface Card with MPO	VIC-030	VESDA multi-function Control Card with Powered Output (MPO). Provides all the features of the VIC-020 with an additional Relay which can be programmed as a Monitored Powered Output. For VESDA VLF	

Programming Options



The PC - Link High Level Interface (PC - Link HLI) connects a PC and VESDA system. Each PC - Link HLI includes two cables (It does not include a PC):

- RS232 from HLI to PC Com portRS485 from HLI to VESDAnet Socket

Product Image	Ordering Code	Description		
	VHH-100	Hand held Programmer including Lead for temporary connection of a programmer to a network via a VESDAnet socket.		
	VHX-0200	Sliding Windows RS232 Interface For Xtralis VSM4 and Xtralis VSC Software		
	VHX-0210	Sliding Windows With Dial In/Dial Out functionality		
	VHX-0300	Open Protocol Peer to Peer High level Interface. RS232 Interface for connection to a BMS or Fire Panel		
	VHX-0310	Open Protocol Master - Slave High level Interface. RS232		
	VHX-0320	VESDA Access HLI Standard		
	VHX-0420	VESDA Modbus Type 3 HLI Standard		
	VHX-1200	Wall-mounted HLI. Links VESDAnet with Xtralis VSM4 and Xtralis VSC. Includes a buitl-in VESDAnet port and VESDAnet socket card.		
	VHX-1300	Wall-mounted Open Protocol Peer-to-Peer		
	VHX-1310	Wall-mounted Open Protocol Master-Slave		
	VHX-1320	VESDA Access HLI Metal Box Wall-mounted		
	VHX-1420	VESDA Modbus Type 3 HLI Metal Box Wall-mounted		

Spare Parts/Modules

Part Number	Description		
VSP-000	Blank plate, with VESDA logo		
VSP-001	Programmer Module		
VSP-002	VLP Display Module		
VSP-003	VESDAnet Socket kit		
VSP-004	VESDA VLS Display Module		
VSP-005	Filter Cartridge		
VSP-007	Remote Termination Card No Relays (RTC0)		
VSP-008	Remote Termination Card 7 Relays (RCT7)		
VSP-011	Recess Mounting Kit for VESDA VLP or VESDA VLS Detector		
VSP-012	Recess Mounting Kit for remote single boxes		
VSP-013	Detector Cover Assembly with EMC Shields		
VSP-014	7 Relay Head Termination Card (HTC7) - for VESDA VLP		
VSP-015	Aspirator for VESDA VLP and VESDA VLS		
VSP-016	12 Relay Head Termination Card (HTC12)		
VSP-018	Filter Switch		
VSP-019	Filter Cover		
VSP-020	VLP and VLS Screw Covers - Pack of 2		
VSP-021	Metric to Imperial Pipe Adapters, Kit of 4		
VSP-022	Mounting box detector		
VSP-023	VLC VN front cover		
VSP-024	VLC RO front cover		
VSP-025	Filter Cartridge - Pack of 20		
VSP-028	VESDA VLP/VESDA VLS Mounting Bracket		
VSP-030	VESDA VLI Intelligent Filter Spare Part		
VSP-031	VESDA VLI Secondary Foam Filter Spare Part		
VSP-032	VESDA VLI Aspirator Spare Part		
VSP-033	VESDA VLI Chamber Assembly Spare Part		
VSP-034	VESDA VLI VESDAnet Card Spare Part		
VSP-035	VESDA VLI Remote Display Module		
VSP-036	VESDA VLI Ultrasonic Flow Manifold Spare		
VSP-100	Blank Plate with FOK LEDs and Logo		
VSP-100US-PCB	Power Supply Circuit Board Only		
VSP-TRAN-120	Transformer Only		
VSP-102	Non Scanner relay processor module (DRP). Required if remote relays are used with no display.		
VSP-103	Scanner relay processor Module (DRP). Required if remote relays are used with no display		
VSP-200	Blank Plate, EMC painted, without Logo		
VSP-208	12 Relay Remote Termination Card (RCT12) - for VESDA VLS		
VSP-501	Aspirator, VESDA VLC		
VSP-502	Compact (VN) Remote Display Module		
VSP-509	Computer lead for use with VESDA VLC Relay Only (RO) & VLF Version		
VSP-510	Compact (RO) Termination Card (CTC-RO) - for VESDA VLC		

Part Number	Description
VSP-511	VESDAnet RS-485 15-way cable
VSP-515	Compact (VN) Termination Card (CTC-VN) - for VESDA VLC
VSP-540	Exhaust Deflector, Black, for use with VESDA VLP, VESDA VLS and VESDA VLC
VSP-715	VLF Aspirator
VSP-722	VESDA VLF-250 Aspirator Assembly (1 fan)
VSP-725	VESDA PSU Filter
VSP Exhaust	Exhaust Deflector, Grey, for use with VESDA VLF
VSP-820	ASD Purge Unit - Single Channel
VSP-850-G	Xtralis In-Line Filter - Gey
VSP-850-R	Xtralis In-Line Filter - Red
VSP-850-M	Xtralis In-Line Filter - Metal
VSP-855-4	Xtralis In-Line Filter Elements - pack of 4
VSP-855-20	Xtralis In-Line Filter Elements - pack of 20
ISP-102-01	Gaswitch Unit (IFT-15, VFT-15)
ISP-106-01	Pump for VFT-15
ISP-110-01	Replacement cover VFT-15
ISP-113-01	Detector chamber for VFT-15
ISP-127	VFT-15 Display Replacement

Batteries and Power Supplies

Batteries

Product Image	Ordering Code	Country	Description
	VBT-012	US	Battery, Sealed, Lead Acid, 12VDC, 12 Amp/Hour (2 Required per Detector)

Power Supplies - US

	VPS-100CN-120			
Nominal AC Supply Voltage	120 VAC/1.4A			
Output Voltage	27.6 V nominal			
Load	Total output current = 6 A			
Dimensions (H x W x D)	Approx. Chassis: 16.5 x 11.8 x 4.5"; Cover 16.9 x 12.2 x 4.6"			
Weight	13.40 lbs			

	VPS-100US-120	VPS-100US-220	VBC-001 *
Nominal AC Supply Voltage	120 VAC	230 VAC	-
Output Voltage	27.6 VDC	C (Nominal)	-
Load	1.5 Am	-	
Dimensions (H x W x D)	13.9 x 9 x 4.5 in.	13.9 x 9. x 4.5 in.	13.9 x 9 x 4.5 in.
Weight	10 lbs. without batteries	10 lbs. without batteries	6 lbs. without batteries

Note: * VBC-001 is a battery cabinet that takes up to 4 batteries, 12 Vdc, 12 Amp/h.

	VPS-300US-120 *	VPS-300US-220 *	
Nominal AC Supply Voltage	120 VAC	220 VAC	
Output Current	1.5 Amps (max.)		
Load	0.5 / 1.0 amps (1 amp not EN54-4)	0.5 / 1.0 amps	

Note: * Each VPS-300US-120 or VPS-300US-220 power supply is a VPS-100US-XXX power supply plus the VBC-001 battery cabinet.

	VPS-400US-48
Nominal DC Supply Voltage	48 VDC
Output Voltage	24 VDC
Load	2.5 amp
Dimensions (H x W x D)	350 x 225 x 125 mm (13.8 x 8.9 x 4.9 in.)
Weight	3.6 Kg (8 lbs.)

VESDA Demo Kits

Ordering Code	Description
VKT-002-US	VESDA VLP VKT-002 Sales Demo Kit, includes VLP-012
VKT-004-US	VESDA VLC VKT-004 Sales Demo Kit, includes VLC-505
VKT-020-US	VESDA VLF VKT-020 Sales Demo Kit, includes VLF-250
VKT-050-US	VESDA VLF VKT-050 Sales Demo Kit, includes VLF-500

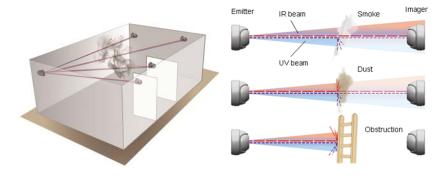
OSID Open-area Smoke Imaging Detection



OSID-DE Dual-ended smoke imaging detector

The dual-ended, OSID-DE (OSI-10 and OSI-90), combines dual frequency (IR and UV) beams with a CMOS Imager detector. OSID-DE operates in both pitch dark as well as bright sunlight. With this new award winning technology also comes; high tolerance to vibration and structural movement as well as good resistance to transient dust, fogging, steam, reflections and object intrusion. On-board log memory for diagnostic purposes completes the picture. The OSI-90 Imager (receiver) can have up to seven emitters and provides easy 3D coverage for atria, domes etc. Fast and easy installation is an extra perk.

True spatial detection



OSID-R

Reflective smoke imaging detector

OSID-R is a single IR beam using also a CMOS imager for signal analysis which provides greater levels of information for better decision making than any simple and basic IR photocell receiver technology. It features good tolerance to structural movement, reflections and object intrusion.

Applications

- Shopping Malls
- Long Corridors
- Airport Terminals and Train Stations
- Heritage Buildings
- Suspended Ceilings
- Challenging Logistics

- Indoor Stadiums and Arenas
- Dirty Environments
- Hotel and Office-tower Atriums
- Churches and Cathedrals
- Exhibition and Convention Centers
- Industrial and Manufacturing Facilities

OSID Products List

OSID-DE

()	OSID-DE is a new innovation in projected beam smoke detection technology. By using advanced dual wavelength projected beams and optical imaging technology for early warning smoke detection, OSID-DE provides a low-cost, reliable and easy-to-install solution that overcomes typical beam detection issues such as false alarm incidents and alignment difficulties.		
Ordering Codes	Description		
OSI-10	Imager - 7º coverage		
OSI-90	Imager - 80º coverage		
OSE-SP-01	Emitter - Alkaline Battery		
OSE-SPW	Emitter - Standard Power, Wired		
OSE-HPW	Emitter - High Power, Wired		
Approvals: UL, ULC, FM, VdS, NF-SSI (AFNOR), CSFM, CCCF, ActivFire, BOSEC, VNIIPO, CE - CPR and EMC			
Dimensions: 208 x 136 x 96 mm (8.19 x 5.35 x 3.78 in.)			
Weight: Imager: 610 g., Emitter (battery powered): 1.2 kg, Emitter (wired): 535 g			
Area Coverage: 2.000 m² (21.520 ft²)			

OSID-R

	OSID-R is a new innovation in reflective beam smoke detection technology. It's using a single IR wavelength projected beam and optical imaging technology for smoke detection. OSID-R provides a low cost, reliable and easy-to-install solution that minimizes typical beam detection issues such as false alarm incidents and alignment difficulties.	
Ordering Codes	Description	
OSI-R	Conventional imaging smoke beam smoke detector including reflector - UL approved	
OSI-RA	Conventional imaging smoke beam smoke detector including reflector - ULC approved	
Approvals: UL, ULC, CSFM, FM		
Dimensions: 152.4 x 254 x 114.3 mm (6 x 10 x 4.5 in.)		
Weight: 1.12 kg (2.48 lbs)		
Area Coverage: 1800 m² (19368 ft²)		

OSID Accessories List

OSID-DE Accessories

Product Name and Image	Ordering Code	Description
Or	OSID-INST	OSID Installation Kit
	OSID-EHE	Emitter environmental housing IP66
< <u>•</u>	OSID-EHI	Imager environmental housing IP66
\bigcirc	OSP-001	FTDI Cable 1.5m
	OSP-002	Laser Alignment tool
	OSID-WG	Wire Guard for Imager and Emitter
	OSE-RBA	Spare alkaline battery pack for Emitter units
	OSE-RBL	Replacement Lithium Ion Kit
	OSE-ACF	Anti-condensation film for Emitters
	OSEH-ACF	Anti-condensation film for OSID-EHE and OSID-EHI environmental housings
	OSP-003	Acrylic test filter - 10 pack
	OSP-003- 200	Acrylic test filter - bulk pack 200 units

Product Name and Image	Ordering Code	Description
•	RTS151KEY	Imager Reset Station Flush Mount
	RTS151KIT	Imager Reset Station Surface Mount

OSID-R Accessories

Product Name and Image	Ordering Code	Description
	OSP-002	Laser Alignment tool
	OSP-004	Test filter - 10 pack
	RTS151KEY	Test and reset station for flush mount
	RTS151KIT	Test and reset station for surface mount
	BEAMHKR	Heater kit for the reflector
T	6500MMK	Multi–mount accessory for ceiling or wall mounting with additional mounting adjustment

OSID-DE Demo Kit

Product Name and Image	Ordering Code	Description
	VKT-301	OSID Demo kit consisting of 2 X OSE-SPW (fitted with alkaline batteries), 1 X OSI-90, 1 X OSID-INST, fitted in a carry case with mounting plates.

OSID-DE Software

Software	Description
	OSID-DE Diagnostic Tool is an industry first and unique to the beam market used to retrieve events and data stored in the Imager. It provides a wealth of information surrounding an alarm, fault or any significant change. Data can be analysed and plotted revealing; IR/UV attenuation, beam positioning, temperature, reference signals, contamination etc.
OSID-DE Diagnostic Tool	Ordering Info: OSID-DE Diagnostic Tool is available for download from www.xtralis.com.
	OSID-DE Selection Assistant. Excel based calculation tool to find the best suited OSID-DE solution for a given area. Also compares OSID-DE the solution to any third party beam, including labor and wiring. Ordering Info: Available for download from www.xtralis.com.
OSID-DE Selection Assistant	

Conventional Optical Smoke Beam Detector



System Sensor 6500RS and 6500R

The 6500RS and 6500R are conventional reflector- type linear optical beam smoke detectors designed to operate as components of conventional fire alarm systems. They operate primarily on the principle of light obscuration utilising an Infra-Red beam. The 6500RS has a unique remote test capability that fully tests both the optics and the electronics of the device. Optical beam smoke detectors are particularly appropriate for protecting buildings with large open spaces such as warehouses, atriums, etc.

Applications

- Shopping Malls
- Long Corridors
- Airport Terminals and Train Stations
- Heritage Buildings

- Indoor Stadiums and Arenas
- Churches and Cathedrals
- Exhibition and Convention Centers

System Sensor 6500 Products List

System Sensor 6500



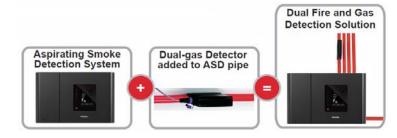
The System Sensor 6500RS and 6500R are conventional reflector- type linear optical beam smoke detectors operating primarily on the principle of light obscuration. The detector uses a single Infra-Red beam and a photocell as receiver.

Ordering Codes	Description
6500R	Conventional Beam Detector
6500RS	Conventional Beam Detector featuring Assuretest remote test capability
Approvals: LPCB, VdS, BOSEC, CE - CPR and EMC	
Dimensions: 254 x 190 x 84 mm	
Weight: 1.77 kg	
Area Coverage: 5 – 100 meters	

System Sensor 6500 Accessories List

Product Name and Image	Ordering Code	Description
	6500-LRK	Long Range reflector kit (70 – 100m range)
T	6500-MMK	Multi–mount accessory for ceiling or wall mounting with additional mounting adjustment (BEAMSMK also required)
	6500-SMK	Surface Mount accessory
Santa and S	ВЕАМНК	Heater kit for the beam
	BEAMHKR	Heater kit for the reflector
•	RTS151KEY	Imager Reset Station Flush Mount
* • •	RTS151KIT	Imager Reset Station Surface Mount

Aspirating Smoke Detection Combined with Gas Monitoring



ASD with Gas Detection and Environmental Monitoring

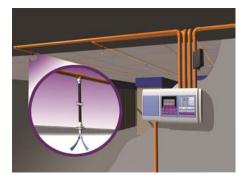
As the world's leading manufacturer of aspirating smoke detection (ASD) solutions, Xtralis is pleased to introduce ECO, the industry's first system to combine ASD with gas detection and environmental monitoring. VESDA ECO:

- Leverages existing VESDA ASD pipe networks to cost effectively detect both smoke and gas in addition to providing environmental monitoring
- Provides detection for multiple gases through simple expansion without major construction or retrofitting
- Suitable for harsh environments
- Provides non-intrusive detection for aesthetics or to prevent vandalism
- Easily integrates with FACP/ PLCs/ HVAC/ BMS

How ECO Works

ECO uses the existing VESDA air-sampling pipe network to actively monitor for gas leaks and continuously ensure air quality in occupied areas.

ECO reliably detects unseen hazards by conditioning or filtering the air to remove moisture, dirt and other particulates that can cause traditional point gas detection systems to false alarm or become contaminated. The VESDA ECO detector is configured using Xtralis VSC configuration software. The detector also can be monitored using Xtralis VSM4 monitoring software. Both Xtralis VSC and Xtralis VSM4 can be used to download data from the on-board memory card for data analysis and trending of historical data.



How VESDA Sensepoint XCL - Large Bore 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 long-term 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.

How VESDA Sensepoint XCL - Micro Bore ASD System Works

VESDA Sensepoint XCL detector can be added to existing or new VESDA-E VEA tube network installations to actively monitor for gas leakages and build-ups. 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. VESDA Sensepoint XCL – Micro Bore ASD System provides significant installation and routine maintenance cost savings by providing easy access to diagnostic information for servicing. Sensor cartridges are easily replaced in the field through simple steps.

Applications

- Battery rooms for the detection of hydrogen
- Boiler rooms for the detection of natural gas or LPG
- Control centers in refineries for detection of methane or hydrogen
 sulfide ingress
- Road tunnels for the detection of carbon monoxide and nitrogen dioxide
- Building utility rooms for the detection of natural gas or LPG
- Elevator shafts for the detection of methane or carbon monoxide
- Warehouse roof spaces for the detection of natural gas from space heaters
- Laboratories for the detection of various flammable and toxic gases
- Enclosed vehicle parking/loading docks for the detection of carbon monoxide and nitrogen dioxide
- Indoor air quality monitoring
- Beverage distilleries

- Detection of various combustible gases in fuel storage areas
- Monitoring of oxygen levels and detection of toxic gases in confined spaces
- Food & beverage for the detection of alcohols and carbon dioxide
- Detection of refrigerant leakage in refrigerated systems
- Greenhouses for the monitoring and control of carbon dioxide levels
- Bus and Train Locomotive Depots
- Universities and schools
- Commercial premises
- Hotels, Hospitals, Residential

VESDA Sensepoint XCL Products List

VESDA Sensepoint XCL- Micro Bore ASD System

	Xtralis the manufacturer of the market leading VESDA Aspirating Smoke Detection (ASD) technology has developed with its sister company Honeywell Analytics a new concept of aspirated gas detectors. When used with the VESDA-E VEA; VESDA Sensepoint XCL provides early warning of the presence of gases for occupant protection and system monitoring whilst at the same time ensuring protection against fire threats. Through its embedded Bluetooth interface, VESDA Sensepoint XCL detector enables customers to pair the gas detector with their smart device applications to perform installation, commissioning and maintenance. This ensures a faster VESDA Sensepoint XCL installation, rapid configuration, simplicity to operate, and simplified maintenance.
Ordering Codes	Description
XCL-VEA-CO-RA	VESDA Sensepoint XCL CO 300ppm 4-20mA Relay for VEA
XCL-VEA-CO-RM	VESDA Sensepoint XCL CO 300ppm Modbus Relay for VEA
XCL-VEA-CH4-RA	VESDA Sensepoint XCL CH ₄ 0-100% LEL 4-20mA Relay for VEA
XCL-VEA-CH4-RM	VESDA Sensepoint XCL CH ₄ 0-100% LEL Modbus Relay for VEA
XCL-VEA-H2-RA	VESDA Sensepoint XCL H ₂ 1000ppm 4-20mA Relay for VEA
XCL-VEA-H2-RM	VESDA Sensepoint XCL H ₂ 1000ppm Modbus Relay for VEA
XCL-VEA-CO2VV-RA	VESDA Sensepoint XCL CO ₂ 5% v/v 4-20mA Relay for VEA
XCL-VEA-CO2VV-RM	VESDA Sensepoint XCL CO ₂ 5% v/v Modbus Relay for VEA
XCL-VEA-CO2PP-RA	VESDA Sensepoint XCL CO ₂ 5000ppm 4-20mA Relay for VEA
XCL-VEA-CO2PP-RM	VESDA Sensepoint XCL CO ₂ 5000ppm Modbus Relay for VEA
XCL-VEA-CO-RA-5	5 x VESDA Sensepoint XCL CO 300ppm 4-20mA Relay for VEA
XCL-VEA-CH4-RA-5	5 x VESDA Sensepoint XCL CH ₄ 0-100% LEL 4-20mA Relay for VEA
XCL-VEA-H2-RA-5	5 x VESDA Sensepoint XCL H ₂ 1000ppm 4-20mA Relay for VEA
Approvals:	
 Electrical Safety ○ Conforms to EN/ ○ Certified to CSA- 	JL/IEC61010-1 C22.2 No. 61010- 1-12

- CE EMC
 - EN 50270
- RADIO
 - RED, FCC, BT SIG
- OTHERS

• UL2075 (CO and CH₄), AS 1668.2

Dimensions: 113 x 113 x 59 mm (4.4 x 4.4 x 2.3 in)

Weight: 500 g (1.1 lb)

Spare Parts

Part Number	Description
XCL-FILTER	VESDA Sensepoint XCL Replacement Filter - Pack of 10
XCL-VEA-CAL	VESDA Sensepoint XCL Calibration/Flow Cap for VEA
XCL-M20-CG	VESDA Sensepoint XCL Cable Glands - Pack of 10
XCL-VEA-TUB	VESDA Sensepoint XCL Tubing Interface for VEA
XCL-COVER	VESDA Sensepoint XCL Sensor Cover with Gasket
XCL-XRL-SC-CO	VESDA Sensepoint XCL/XRL Replacement Sensor - CO 300ppm

Part Number	Description
XCL-SC-CH4	VESDA Sensepoint XCL Replacement Sensor – CH ₄ 0-100% LEL
XCL-XRL-SC-H2	VESDA Sensepoint XCL/XRL Replacement Sensor – H_2 1000ppm
XCL-SC-CO2VV	VESDA Sensepoint XCL Replacement Sensor - CO ₂ 5% v/v
XCL-SC-CO2PP	VESDA Sensepoint XCL Replacement Sensor - CO ₂ 5000ppm

VESDA Sensepoint XCL- Large Bore

	VESDA Sensepoint XCL – Large Bore is a gas detection solution that utilizes the
	ASD pipe network to deliver superior gas detection via multiple hole (multi-point) sampling. The combined solution provides reliable detection of gases for occupant protection and process monitoring whilst simultaneously ensuring protection against fire threats.
	The VESDA Sensepoint XCL – Large Bore portfolio has a range of gas sensors that addresses a wide range of applications and through its Bluetooth interface can be paired with a smart device for commissioning and maintenance. The smart device application (Sensepoint App) provides quick access to detector diagnostic information and simplifies detector configuration, calibration and bump testing.
Ordering Codes	Description
XCL-LB-CH4-RA	Flammable (CAT) 20-100% LEL 4-20mA Relay
XCL-LB-CH4-RM	Flammable (CAT) 20-100% LEL Modbus Relay
XCL-LB-O2-RA	Oxygen 25.0% v/v (Fixed) 4-20mA Relay
XCL-LB-O2-RM	Oxygen 25.0% v/v (Fixed) Modbus Relay
XCL-LB-CO-RA	Carbon Monoxide 50 to 1000 ppm 4-20mA Relay
XCL-LB-CO-RM	Carbon Monoxide 50 to 1000 ppm Modbus Relay
XCL-LB-H2-RA	Hydrogen 1000ppm (Fixed) 4-20mA Relay
XCL-LB-H2-RM	Hydrogen 1000ppm (Fixed) Modbus Relay
XCL-LB-H2S-RA	Hydrogen Sulphide 10 to 50 ppm 4-20mA Relay
XCL-LB-H2S-RM	Hydrogen Sulphide 10 to 50 ppm Modbus Relay
XCL-LB-NO2-RA	Nitrogen Dioxide 5 to 50 ppm 4-20mA Relay
XCL-LB-NO2-RM	Nitrogen Dioxide 5 to 50 ppm Modbus Relay
XCL-LB-NH3-RA	Ammonia 50 to 200 ppm 4-20mA Relay
XCL-LB-NH3-RM	Ammonia 50 to 200 ppm Modbus Relay
XCL-LB-CO2PP-RA	Carbon Dioxide 1000 to 5000 ppm 4-20mA Relay
XCL-LB-CO2PP-RM	Carbon Dioxide 1000 to 5000 ppm Modbus Relay
XCL-LB-CO2VV-RA	Carbon Dioxide 1.0 to 5.0% v/v 4-20mA Relay
XCL-LB-CO2VV-RM	Carbon Dioxide 1.0 to 5.0% v/v Modbus Relay
Approvalo	

Approvals:

Electrical Safety

- Conforms to EN/UL/IEC61010-1
- $\circ~$ Certified to CSA-C22.2 No. 61010- 1-12
- CE EMC
 - EN 50270
- RADIO
 - RED, FCC, BT SIG
- OTHERS
 - UL2075 (CO and CH₄), AS 1668.2

Spare Parts

Part Number	Description
XCL-LB-CAP	Flow Cap
XCL-LB-ELB	60° Elbows – pack of 4
XCL-M20-CG	Cable Glands – pack of 10
XCL-LB-FLT-1	Filter CAT, NH_3 , CO_2 – pack of 10
XCL-LB-FLT-2	Filter CO, O_2 , H_2S , NO_2 , H_2 – pack of 10
XCL-LB-COV-1	Sensor Cover CAT, NH ₃ , CO ₂
XCL-LB-COV-2	Sensor Cover CO, O ₂ , H ₂ S, NO ₂ , H ₂
XCL-SC-O2	Replacement Sensor - O ₂ 25% v/v
XCL-SC-NH3	Replacement Sensor - NH ₃ 50-200 ppm
XCL-SC-NO2	Replacement Sensor - NO ₂ 5-50 ppm
XCL-SC-H2S	Replacement Sensor - H ₂ S 10-50 ppm
XCL-XRL-SC-H2	Replacement Sensor - H ₂ 1000 ppm
XCL-XRL-SC-CO	Replacement Sensor - CO 50-1000 ppm
XCL-SC-CO2VV	Replacement Sensor - CO ₂ 1.0-5.0% v/v
XCL-SC-CO2PP	Replacement Sensor - CO ₂ 1000-5000 ppm
XCL-SC-CH4	Replacement Sensor - CH ₄ 20-100% LEL

ECO Products List

VESDA ECO Ex Gas Detector



VESDA ECO Ex provides early warning of flammable (alcohols) 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. It must be used with a similarly approved VESDA ASD and installed within the Class I Div 2 area.

Ordering Codes	Description (Single Gas, Class 1 Division 2)
ECO-D-B-20-Ex	Alcohol Vapor 0-100% LEL
Part NumberStructure	Description
ECO-D-B-AA-Ex	Single Gas Unit Replace AA with the relevant gas type number.

Approvals:

- Electrical Safety
 - Conforms to ANSI/UL Std 61010-1
 - Certified to CAN/CSA Std C22.2 No. 61010-1
 - EN 61010-1

• EMC

- FCC 47CFR Part 15B class B
- ICES 003
- EN 50270

Hazardous Location

- ETL approved to ISA12.12.01, CSA C22.2 No. 213
- Class I Div 2 Groups ABC&D T4 -4°F \leq Tamb \leq +131°F

Dimensions: 155 x 135 x 74 mm (6.1 x 5.3 x 2.9 in.)

Weight: 1 kg (2.2 lb) detector and enclosure combined

VESDA ECO Accessories List

Replacement Cartridges (Single Gas)

Ordering Code	Description
ECO-SC-11	Hydrogen (H2) 0-100% LEL
ECO-SC-12	Methane (CH4) 0-100% LEL
ECO-SC-13	Propane (C3H8) 0-100% LEL
ECO-SC-14	Hydrogen (H2) 0-2000 ppm
ECO-SC-15	Petrol/Gasoline Vapor 0-100% LEL
ECO-SC-16	Pentane (C5H12) 1-100% LEL
ECO-SC-20	Alcohol Vapor 0-100% LEL
ECO-SC-31	Oxygen (O2) 0-25% VOL
ECO-SC-32	Oxygen (O2) 0-25% VOL - Deficiency and enrichment alarm
ECO-SC-41	Carbon Monoxide (CO) 0-500 PPM
ECO-SC-43	Hydrogen Sulfide (H2S) 0-100 PPM
ECO-SC-44	Sulfur Dioxide (SO2) 0-10 PPM
ECO-SC-45	Nitrogen Dioxide (NO2) 0-10 PPM
ECO-SC-49	Carbon Dioxide (CO2) 0-5% VOL

Replacement Cartridges (Dual Gas)

Ordering Code	Description
ECO-SC-11-31	Hydrogen (H2) 0-100% LEL + Oxygen (O2) 0-25% VOL
ECO-SC-12-31	Methane (CH4) 0-100% LEL + Oxygen (O2) 0-25% VOL
ECO-SC-12-41	Methane (CH4) 0-100% LEL + Carbon Monoxide (CO) 0-500 PPM
ECO-SC-12-43	Methane (CH4) 0-100% LEL + Hydrogen Sulfide (H2S) 0-100 PPM
ECO-SC-13-31	Propane (C3H8) 0-100% LEL + Oxygen (O2) 0-25% VOL
ECO-SC-31-41	Oxygen (O2) 0-25% VOL + Carbon Monoxide (CO) 0-500 PPM
ECO-SC-41-43	Carbon Monoxide (CO) 0-500 PPM + Hydrogen Sulfide (H2S) 0-100 PPM
ECO-SC-41-45	Carbon Monoxide (CO) 0-500 PPM + Nitrogen Dioxide (NO2) 0-10 PPM

Replacement Cartridges (Class 1, Division 2)

Ordering Code	Description
ECO-SC-11-Ex	Hydrogen (H2) 0-100% LEL
ECO-SC-12-Ex	Methane (CH4) 0-100% LEL
ECO-SC-13-Ex	Propane (C3H8) 0-100% LEL
ECO-SC-14-Ex	Hydrogen (H2) 0-2000 PPM
ECO-SC-15-Ex	Petrol/Gasoline Vapor 0-100% LEL
ECO-SC-16-Ex	Pentane (C5H12) 0-100% LEL
ECO-SC-20-Ex	Alcohol Vapor 0-100% LEL
ECO-SC-31-Ex	Oxygen (O2) 0-25% VOL - deficiency alarm only
ECO-SC-32-Ex	Oxygen (O2) 0-25% VOL - deficiency and enrichement alarm
ECO-SC-41-Ex	Carbon Monoxide (CO) 0-500 PPM
ECO-SC-43-Ex	Hydrogen Sulfide (H2S) 0-100 PPM
ECO-SC-44-Ex	Sulfur Dioxide (SO2) 0-10 PPM

Ordering Code	Description
ECO-SC-45-Ex	Nitrogen Dioxide (NO2) 0-10 PPM
ECO-SC-49-Ex	Carbon Dioxide (CO2) 0-5% VOL

Replacement Cartridges (Dual Gas, Class 1 Division 2)

Ordering Code	Description
ECO-SC-12-43-Ex	Methane (CH4) 0-100% LEL + Hydrogen Sulfide (H2S) 0-100 PPM
ECO-SC-13-31-Ex	Propane (C3H8) 0-100% LEL + Oxygen (O2) 0-25% VOL

Replacement Parts and Adaptors

Product Image	Ordering Code	Description
	ECO-D-S-01	ECO detector with no sensor cartridge
	LF41333	Filter Cartridge Assembly
Ŧ	LF41291	USB access port Rubber Bung
6	LF41313	USB Connection Lead
\cap	LF41301	Sensor Cartridge O-Ring
\cup	LF41302	Filter Cartridge O-Ring
	LF41312	MicroSD Card

Xtralis Li-ion Tamer Battery Rack Monitor



The Li-ion Tamer Rack Monitor system is a gas detection solution that enhances the safety of lithium ion batteries installations. It provides an alert to "off- gas" events that occur early in the failure mode of li-ion batteries well in advance of smoke detection and traditional LFL gas detectors. Early warning of off-gas events enables proper mitigation steps to be taken to avoid progression to a catastrophic thermal runaway failure.

The Li-ion Tamer Rack Monitoring system is designed to be plug-and-play, easily to install and consists of two primary components, (i) off-gas sensors, (ii) controller.

- Off-gas sensors comprise on-board detection algorithms making them acutely sensitive to lithium-ion battery off-gassing compounds, do not require calibration, are compatible with all forms of lithium-ion battery form factors and chemistries and have a lifetime comparable to a typical lithium-ion battery system.
- Off-gas sensors are connected to the controller that contains proprietary logic to diagnose when and where battery off-gas events have occurred. It has digital and Modbus serial outputs that can be used to electrically isolate the battery system and activate the ventilation system.

Applications

- Any containerized or purpose build lithium-ion battery Energy Storage Systems (ESS)
- Data Centers where reliable power sources are essential
- On-shore and off-shore Marine applications
- · Commercial environments where lithium-ion storage is applied

Xtralis Li-ion Tamer Products List

Li-ion Tamer Battery Rack Monitor

• LHON TAMER® • strate	The Li-ion Tamer Battery Rack Monitor is a safety product specifically designed to detect the potential thermal runaway of lithium-ion batteries. The key to Li-ion Tamer's value proposition is the distributed gas sensing network that provides the earliest warning of battery failure by detecting single cell off-gas events which precede thermal runaway. If Li-ion Tamer off-gas monitoring is paired with proper mitigating actions, thermal runaway can be entirely avoided.	
Ordering Codes	ltem	Description
LT-SEN-M	OGM, Monitoring Sensor	Mounted on/near Li-ion battery rack to detect off-gas from cells
LT-SEN-R	OGM, Reference sensor	Mounted around the ESS
LT-CTR-C	Combined Controller	Controller with 12 ports for monitoring and 3 ports for reference sensors
LT-ACC-PCL	10' Power Cable	Power cable for all Li-ion Tamer controllers
LT-ACC-DCL	10' Digital Output Cable	Digital output cable for all Li-ion Tamer controllers
LT-ACC-MCL-25, -50, - 100	25, 50, 100 (ft) Monitoring Sensor Cable (various lengths)	Shielded RJ45 connector cable used with Monitoring sensors, Black
LT-ACC-RCL-25, -50, - 100	25, 50, 100 (ft) Reference Sensor Cable (various lengths)	Shielded RJ45 connector cable used with Reference sensors, Blue
LT-ACC-CCL-1, -3, -25, - 50, -100	1, 3, 25, 50, 100 (ft) Controller Daisy Chain Cable (various lengths)	Shielded RJ45 connector cable used to daisy-chain reference network signal to other controllers, Grey
LT-ACC-SCL-MF	6' Male-Female Serial Cable	MODBUS DB9 RS232 cable to connect the serial output to the TCP/IP Adapter or customer interface
LT-ACC-IPA	MODBUS TCP/IP Adapter	Adapter for changing the native MODBUS RTU output from the Li-ion Tamer controller to MODBUS TCP/IP
LT-ACC-RLY	Form C Relay	Standard dry-contact Form C relay
LT-ACC-TST	Li-ion Tamer Puff Test DEC Bottle	A plastic bottle with a small amount of DEC for use during bump testing of sensors
LT-ACC-BKT-PK5	Sensor Mount Kit Spare - 5BKT 10NUT	Sensor Mount Kit Spare – 5x brackets 10x nuts

• ETL listed to UL 61010 and CSA 22.2 NO. 61010 for product safety

• EN 61326 for EU Directive (2014/30/EU)

• RoHS 3 EU 2015/863

Controller's Dimensions: 210 (W) x 113 (L) x 63 (H))

Xtralis



How it works

The XAS systems actively draw air from the protected area through sampling holes in a pipe network. Sampled air is then filtered before being analyzed by conventional or analog point detectors incorporated in the systems. The XAS system is available with one inlet pipe (XAS-1) or two inlet pipes (XAS-2), and can be used with one or two detectors per system. A number of different points from a range of leading technology providers may be used.

The systems utilize a high performance aspirator and programmable flow monitoring circuitry. Air flow level is displayed on a ten element bar graph that can be adjusted for high and low flow thresholds, and flow failure is reported as a device fault via relays to the monitoring system.

Why use Xtralis Smoke Detection Solutions:

- Tamper-proof sampling points which deter vandalism
- Sampling pipe can be located behind vents, invisible to inmates
- The ability to locate sampling holes where smoke will travel and to position the detector in a location that has easy access for maintenance
- Remote monitoring and configuration of detectors improves control and cost of ownership in unmanned or secured areas

Applications

- Where duct detectors are difficult to maintain and service;
- · Where an aerial lift device must be used to service duct detectors; and
- · Where unobtrusive smoke detection is required

Xtralis Products List

Xtralis XAS



The Xtralis XAS Air-sampling Smoke Detection system provides a flexible detection solution to meet unique needs of challenging applications found in typical commercial and industrial sites. The XAS solution is well suited to installations where access to the monitored areas is restricted and provides unobtrusive detection. The ability to mount the device outside the protected area makes it ideal for use in applications such as correctional facilities, transformer vaults, cable tunnels, elevator machine rooms and HVAC ducts.

Description	
Air-sampling Smoke Detector with 1 inlet with metal enclosure for the US	
Air-sampling Smoke Detector with 2 inlets with metal enclosure for the US	
Approvals: UL-268, UL-268A, ULC-529	
Dimensions: 259 x 321 x 166 mm (10.2 x 12.6 x 6.5 in.)	
Weight: 1.2 Kg (2.65 lbs)	
Area Coverage: 2.000 m ² (21.520 ft ²)	
,	

Note: Point detectors are ordered from their manufacturer/supplier; while baffles are ordered separately from Xtralis depending on the point detector type.

Xtralis Accessories List

XAS Flex Tubing

Ordering Code	Description	
LF-42249	50" flexible dual core tubing, provides two 25 foot long 1/2" I.D. flexible tubes for use with XAS units in duct sampling arrangements.	
LF-42250	25" flexible dual core tubing, provides two 25 foot long 1/2" I.D. flexible tubes for use with XAS units in duct sampling arrangements.	

XAS Sample & Exhaust Tubes - Single Zone Kits

Ordering Code	Description
LF-42285	18" - 2 hole sample and exhaust tube kit
LF-42286	36" - 3 hole sample and exhaust tube kit
LF-42287	60" - 4 hole sample and exhaust tube kit

XAS Sample & Exhaust Tubes - Dual Zone Kits

Ordering Code	Description
LF-42288	18" - 2 hole sample and exhaust tube kit
LF-42289	36" - 3 hole sample and exhaust tube kit
LF-42290	60" - 4 hole sample and exhaust tube kit

XAS Duct Kits

Ordering Code	Description
LF-42241	Single zone sampling kit, includes two tube mounting plates, compression fittings, adaptors, elbows and reducers for use with XAS-1-US inlet and exhaust tubes and flexible tubing.
LF-42243	Dual zone sampling kit, includes three tube mounting plates, compression fittings, adaptors, elbows and reducers for use with XAS-2-US inlet and exhaust tubes and flexible tubing.

XAS Miscellaneous

Ordering Code	Description
ISP-001	Filter element pack of 10 (Coarse) 20 ppi black
20-LA0015-03	Corner Stud Key
20-LA0016-01	Corner studs
80-0020-0	Filter element (Coarse) FRS20
27-1002-00	Rubber Grommet
34-1251-T3	1.25 A, Anti-surge fuse
LF-42265	Duct sampling probe/exhaust pipe end cap
29624	Pipe label

Baffles

Ordering Code	Description
06-0000	Blanking baffle for replacement purposes. XAS-1-US unit is supplied with one blanking baffle in the right side mounting location (pack of 10)
06-AP10	Baffle for Apollo detector Discovery, S65 & XP95, GE Security detector DP 652, DP 951, DP 991 (pack of 10)
06-HK10	Baffle for Hochiki detector SLR-E3 & ALG-E (pack of 10)
06-HK40	Baffle for Hochiki detector SLV-24V (pack of 10)
06-HN10	 Baffle for the following Honeywell detectors: System Sensor 2251B or 2251BA Notifier - Fire Warden NP-100 or NP-100A Gamewell/FCI ASD-PL2F or ASD-PL2FA Silent Knight IDP-PHOTO or SK-PHOTO Firelite SD355 or SD355A Honeywell TC806B1076 or TC806B1076CDN JCI 2951J or 2951JA
06-SE10	Baffle for use with Siemens HFP-11 sensor (pack of 10)
06-SE20	Baffle for Siemens Point Detectors FDO421 and OP921 (pack of 10)
06-SE30	Baffle for Siemens Point Detectors FDOOT441, OOH941, FDOOTC441 and OOHC941 (pack of 10)
06-NF10	Baffle for Notifier FPS-851, FSA-851A and Johnson Controls A2951JA detectors (pack of 10)

Software

iVESDA

Software Image	Description
Normal Image: Control of the second sec	iVESDA is a downloadable application that can be installed on Android and iOS handheld devices and used to monitor and maintain VESDA-E systems with unprecedented ease. It is also compatible with existing VESDA detectors residing on the same VESDAnet as the VESDA-E devices. iVESDA provides detailed alarm, fault and other status information such as smoke trends, airflow, filter life, as well as viewing of important configuration parameters such as pipes in use and smoke alarm thresholds.
	Ordering Info: Downloadable from GooglePlay store and Apple store.
Supported Products	 VESDA-E VEU VESDA-E VEA VESDA-E VEP VESDA VLP VESDA VLS VESDA VLC VESDA VLF VESDA VLI

ASPIRE

Software Image	Description
	ASPIRE is a Windows [®] -based application that aids the specification and design of pipe networks for VESDA and ICAM air sampling smoke detectors. It provides the designer with tools to speed the design process and ensure optimum network performance and installation quality. Ordering Info: ASPIRE is available for download from www.xtralis.com.
Supported Products	VESDA-E • VESDA-E VEU • VESDA-E VEP • VESDA-E VES
	VESDA • VESDA VLP • VESDA VLF-250 • VESDA VLF-500 • VESDA VLI • VESDA VLP • VESDA VLS

Xtralis VSC

Software Image	Description					
	Xtralis VSC configures, commissions and maintains a range of Xtralis fire and gas detection systems including VESDA and ICAM smoke and gas detectors and anciliary devices. Xtralis VSC can configure a single Xtralis device or your entire Xtralis system.					
Supported Products	Ordering Code: VSW-100 ECO VESDAnet					
	• ECO Detector • Sensor • Relay • Analog Output • CO ppm Sensor • NH ₃ ppm Sensor • 0_2 %. v/v Sensor • 1_2 %. LFL Sensor • H_2 %. LFL Sensor • H_2 Sppm Sensor • NO_2 ppm Sensor • CG_4 %. LFL Sensor • C_3H_8 %. LFL Sensor • C_3H_8 %. LFL Sensor • C_2 %. v/v Sensor • C_2 %. v/v Sensor • C_2 %. v/v Sensor • C_5H_{12} '%. LFL Sensor • O_2 Dep/Enr %. v/v Sensor • $Alcoh$ %. LFL Sensor • $Alcoh$ %. LFL Sensor • Pet Vap '%. LFL Sensor • NH_3 %. LFL Sensor	 VESDA VLP VESDA VLS VESDA VLC VESDA VLF VESDA VLC VESDA VLS VESDA VLI VESDA-E VEU VESDA-E VEP VESDA-E VER VESDA-E VES Remote Relay VESDA Display System Relay Module VLS Remote Relay VLS Display VESDA Sliding Windows HLI VESDA Sliding Windows HLI with Dial Out Analog Output Module VESDA Access HLI VESDA MODBUS3 HLI VESDA VLF VESDA VLF VESDA VLF VESDA VLF Multifunction 020 Control Card Multifunction 030 Control Card 				

Xtralis VSM4

Software Image		Description				
	Xtralis VSM4 provides full and comprehensive integration of your VESDA and ICAM smoke and gas detection systems. Note: To correctly specify (order) the Xtralis VSM4 product, the following must be taken into consideration for each particular Xtralis VSM4 application.					
	 What are the total number of Monitoring PC's. 1 Primary PC is the minimum. Are there any Text to Speech requirements What are the total number of VESDAnetsto be monitored What are the total number of VESDA detectors on the VESDAnets to be monitored What are the total number of "Direct Connect" VESDA detectors. 					
	Ordering Info:Xt	ralis VSM4 is available for download from www.xtralis.com.				
	Ordering Code Description					
	VSW-206	First PC License				
	VSW-216	Additional PC License PC				
	VSW-226	VSM Primary PC (upgrade from VSM3)				
	VSW-346	VESDAnet network Connection				
	VSW-356	VESDAnet Detector Connection per detector				
	VSW-366	VESDAtalk / VESDAlink Detector Connection				
	VSW-427-001	Connection tokens lic (1-20)				
	VSW-427-002	Connection tokens lic (21-100)				
	VSW-427-003	Connection token lic (101-1000)				
	VSW-427-004	Connection token lic (>1000)				
	VSW-501	Text to Speech (Add voice message)				
	VSW-502	Text to Speech - English				
	VSW-517	Text to Speech - English-American				
	VSW-600	Remote Notification - Email Support (Per PC)				
	VSW-356-ECO	VESDA ECO Detector network connection One required per monitored detector				

Software Image		Description
Supported Products	ECO • ECO Detector • Sensor • Relay • Analog Output • CO ppm Sensor • NH ₃ ppm Sensor • 0_2 %. v/v Sensor • H_2 %. LFL Sensor • H_2 %. LFL Sensor • H_2 S ppm Sensor • NO_2 ppm Sensor • NO_2 ppm Sensor • CH_4 %. LFL Sensor • C_3H_8 %. LFL Sensor • C_3H_8 %. LFL Sensor • C_2 ppm Sensor • C_2 %. v/v Sensor • C_2 %. v/v Sensor • C_2 %. v/v Sensor • C_5H_{12} %. LFL Sensor • O_2 Dep/Enr %. v/v Sensor • Alcoh %. LFL Sensor • Pet Vap '%. LFL Sensor • NH_3 %. LFL Sensor	VESDAnet VESDA VLP VESDA VLS VESDA VLC VESDA VLF VESDA VLC VESDA VLS VESDA VLS VESDA VLI VESDA-E VEA VESDA-E VEU VESDA-E VEP VESDA-E VES Remote Relay VESDA Display VESDA Display VLS Display VLS Display VESDA Programmer VESDA Sliding Windows HLI VESDA Stop-and-go HLI VESDA Sliding Windows HLI with Dial Out Analog Output Module VESDA ModBus HLI
	0	Analog Output ModuleVESDA ModBus HLI
	 VESDA VLC LP Phase 1 VESDA VLC Ro Phase 1 VESDA VLC Simplex Phase 2 VESDA VLC 800-MX Phase 2 VESDA VLC ESSER Phase 2 VESDA VLC AP Phase 2 	VESDAtalk VESDA VLF VESDAnet Card Multifunction 020 Control Card Multifunction 030 Control Card

Pipes and Fittings

Product Image	Ordering Code	Country	Description
	VP-P-105	US	Pipe - ¾" (105 ft. kit)
URSEN Santa Estator Santan Taka 10.	VP-P-210	US	VESDA CPVC pipe. Sold in box quantities of 210 linear feet.
	VP-P-420	US	VESDA CPVC pipe. Sold in box quantities of 420 linear feet.
	VP-COUP	US	Coupling, 3/4", Socket to Socket CPVC Couplings
	VP-UNION	US	Socket Union, 3/4" CPVC Union
	VP-ELB-45	US	Elbow - 45°, 3/4", Socket to Socket, 45°, CPVC Elbow
	VP-EC	US	End Cap, 3/4" CPVC
	VP-TEE	US	3/4" CPVC Pipe Tees
9	VP-CLIP-US	US	3/4" pipe support clamp
Almar Bistorer	VP-CEMENT	US	Solvent Cement
	VP-BV	US	Ball Valve, 10 per box
5	VP-CUTTERS	US	CPVC Pipe Cutters. cuts up to 1 1/2" pipe
A STATE OF TRANSPORT	E700-SP	US	Miniature Sampling Point

Product Image	Ordering Code	Country	Description
0	PIP-015		Flush Sample Point Head only (for 10 mm OD tube)
6	VP-TEE-FPT	US	Tee, 3/4" x 1/2" FPY (pack of 10)
F	VP-ELB-90	US	3/4", Socket to Socket, 90°, CPVC Elbow
	128-014		Label - Sampling Point
A CONTRACT OF CONTRACT.	128-015		VESDA sampling pipe labels (100 per roll)
VESDA® SMOKE	E700-SPLR- DCL		VESDA sampling point wrap around labels (200 per roll)
\bigcap	VSP-860-US	US	Refrigerated Storage Sampling Kit - US * Please ensure PIP-008 (T-Piece) is also used.
	VSP-870-US	US	In-line Flow Restrictor Assembly - US
	VSP-871		Flow Restrictor Disc (pack of 10)
Care and	VSP-877		Flush Mount Sampling Point
	VSP-877-B		Flush Mount Sampling Point (Black)
	VSP-877-G		Flush Mount Sampling Point (Grey)
	VSP-878		Push-in Connect Adaptor Kit for ½" capillary tubing

Product Image	Ordering Code	Country	Description
	E700-TUBE		Polyethylene tubing, black. 1/2" OD x 3/8" ID, FPE rated
	TUBING-250		Polyethylene tubing, black. 1/2" OD x 3/8" ID, FPE rated
	E700-CAP KIT		Plastic connector kit for miniature sampling point and capillary tube arrangement. Includes (1) Male connector, (1/2" thread x 1/2" OD Compression) and (1) Female Connector, (1/2" OD Compression)
	CAP-KIT		Brass connector kit for miniature sampling point and capillary tube arrangement. Includes (1) Male connector, (1/2" thread x 1/2" OD Compression) and (1) Female Connector, (1/2" OD Compression)
\bigcirc	E700-SPLR		Miniature sampling point label, round style, red
	E700-SPLG		Miniature sampling point label, round style, grey
CAUTION • CAUTION • CAUTION • VESDA SMOKE DETECTOR SAMPING PIPE DO NOT REAMPLE PRAY OR OBELERCE	E700-SP-DCL- PIPE		Sampling pipe labels. Sold in roll quantity of 35.
	E700-SP-DCL		Sampling Point Decal, wrap around style (200 per roll). Place center area over sampling point and wrap decal around diameter of pipe.
	VSP-610		Tamper Proof Sampling Point Metric measurements
	VSP-610-US	US	Tamper Proof Sampling Point, 1" / 25 mm rigid of flexible conduit. Imperial measurements
	VSP-620-01		Tamper Proof Sampling Point, 6 mm capillary
	VSP-620-02		Tamper Proof Sampling Point, 8 mm capillary
	VSP-620-03		Tamper Proof Sampling Point, 10 mm capillary
	VSP-990		VESDA-E VEA 6mm Microbore Tube – 1000 ft, UL compliant Plenum Rated
	VSP-991		VESDA-E VEA 4mm Microbore Tube – 500 ft, UL compliant Plenum Rated
	02-3000-06		Stainless Steel Sampling Point (6 mm)
C til	02-2002-01P		Straight Union for microbore 1/4" (6mm) tube
	02-2003-01P		Tee Union for microbore 6 mm Tube (pack of 10)
	02-FL01-01		Sintered EOL Filter for Microbore 6 mm Tube

Test and Commissioning Tools

Xtralis Test Transformer VTT-10000 is a tool used to test very early warning aspirated smoke detection equipment. It is used with VESDA-E, VESDA and ICAM.

Test Transformer

Product Image	Ordering Code	Country	Description
	VTT-10000- USA	US	VESDA Test Transformer (Wire Burner) Previously known as the Hot Wire Test. This power supply unit is used to test VESDA-E, VESDA equipment. A timer is incorporated to provide a selectable burn period of up to 3 minutes.
	251-001		Smoke Test Wire

Smoke Pen

Product Image	Ordering Code	Country	Description
	VSP-810		Smoke Pen with 6 wicks
	VSP-811		Refill pack of 6 wicks

Scorpion Test System

Product Image	Ordering Code	Country	Description
	PIP-040		ASD Head Unit Kit (includes Scorpion ASD Test Head & low level Access Point)
	PIP-041		Engineer's Portable Controller
Q	PIP-042		Battery Pack to power engineers controller
	PIP-043		Battery charger kit including car charger

General Tools

Product Image	Ordering Code	Country	Description
trais instance ins	VSP-950		Test point pipe labels
	VSP-TP-KIT- US		Benchmark Test Point Kit (1 assembly, includes 1 Test Plug)

Location

Location	Contact Numbers
Americas	
12 Clintonville Road Northford, CT 06472 USA	Toll Free: 800 229 4434 Tel: (781) 740 4433 Fax: (781) 740 4433

Technical Support

Type of Service	Country	Address
VESDA	Americas	Tel: (800) 229-4434 support-vesda@xtralis.com
General Customer Service Inquiries	Americas	Tel: (800) 229-4434 customerservice@xtralis.com
Service Center for Returns/Repairs service	Americas	support-vesda@xtralis.com



ABOUT XTRALIS



Xtralis is the leading global provider of powerful solutions for the very early and 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 valued assets and infrastructure belonging to the world's top governments and businesses.

To learn more, please visit us at www.xtralis.com