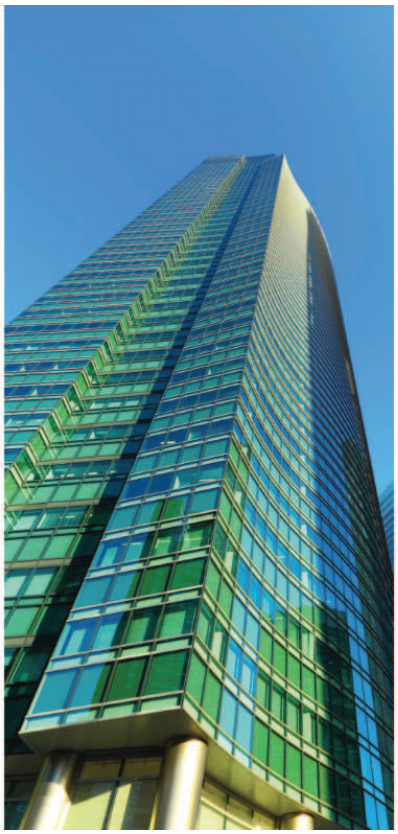
# Safety Solutions Product Catalogue

(US)








www.xtralis.com

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# About Xtralis

Xtralis is a 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 ASD
- VESDA ASD
- Industrial VESDA VLI ASD for Industrial Applications
- OSID Open-Area Smoke Detection
- 6500 Beam Detection
- Li-ion Tamer GEN 3

Learn more: www.xtralis.com

ABOUT XTRALIS

# Safety Products

Xtralis is the inventor and pioneer of VESDA 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 ASD

VESDA-E is the next generation of 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 VEA introduces pinpoint addressability to deliver situational awareness to improve response time and efficiency for up to 40 locations. Other advanced features, including StaX expansion modules, add capabilities like gas detection for enhanced detection and monitoring, 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 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.

Li-ion Tamer GEN 3 system provides the earliest detection of failing lithium-ion batteries (detection of battery electrolyte vapours), well in advance of smoke and conventional gas detectors. With early warning of the initial signs of failing lithium-ion batteries, proper mitigation steps can be taken to prevent progression to a catastrophic thermal runaway.

Li-ion Tamer Sensor Multi Output Solution (MOS) is a device that detects 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. It is also capable of detecting 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.

### 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) 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.

### Video Image Fire Detection

The Failsafe Thermography Detector (FTD) is a bi-spectral (IR & Visual) smart edge device that has been specifically designed for early warning heat-detection.

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.

# Choose the Right Product for your Segment and Application

Vertical Market

| Coverage | 6,500 m² | 3,345 m² | 2,000 m² | | | 2-pipe: 2,000 m² | 1-pipe: 1,600 m² | 1,000 m² | 500 m² | 250 m² | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detection | UVEW | AEW | VEW | AVEW | IVEW | VEW | VEW | VEW | VEW | | Beam | Gas | Video Image |
| Product | VEU | VEA | VEP-4 | VES | VLI | FAAST FLEX | | VEP-1 | VLF | | OSID | Li-ion Tamer | VIS-IR |
| IT and Communications | ■ | | ■ | ■ | | | | ■ | ■ | ■ | | ■ | |
| Clean Room | ■ | | ■ | ■ | | | | ■ | | | | | |
| Highrise and Residential | | ■ | ■ | | | | | | | ■ | | ■ | |
| Manufacturing | ■ | | ■ | ■ | ■ | | | ■ | | | ■ | | ■ |
| Airport | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Railway | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | ■ | ■ | | |
| Logistics / Warehouse | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | | | ■ | ■ | |
| Logistics / Cold Storage | ■ | | ■ | | ■ | ■ | ■ | ■ | | | | | |
| Gigafactories | | | | | | | | | | | | ■ | |
| Battery Energy Storage Systems (BESS) | | | | | | | | | | | | ■ | ■ |
| Solar/Wind | | | ■ | | ■ | | | ■ | | | | ■ | |
| Correctional Facilities | | ■ | | ■ | | ■ | ■ | | ■ | ■ | | | |
| Cultural and Heritage | ■ | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | | |
| Power | ■ | | ■ | ■ | ■ | | | ■ | ■ | ■ | | ■ | ■ |
| Retail and Commercial | | ■ | ■ | ■ | | ■ | ■ | ■ | ■ | ■ | ■ | ■ | |
| Oil and Gas | ■ | | ■ | ■ | ■ | | | ■ | | | | ■ | |
| Sporting Venues | ■ | | ■ | ■ | | | | ■ | | | ■ | | |
| Education | | ■ | ■ | ■ | | ■ | ■ | ■ | | | ■ | ■ | |
| Food/Drink Processing Plants | | | | | | | | | | | | | ■ |
| Waste Recycling | ■ | | ■ | | ■ | | | ■ | | | | | ■ |
| Mining | ■ | | ■ | | ■ | | | ■ | | | | | |

| Aplication | Coverage | 6,500 m² | 3,345 m² | 2,000 m² | | | 2-pipe: 2000m² | 1-pipe: 1600m² | 1000m² | 500m² | 250m² | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Detection | UVEW | AEW | VEW | AVEW | IVEW | VEW | VEW | VEW | VEW | | Beam | Gas | Video Image |
| | Product | VEU | VEA | VEP-4 | VES | VLI | FAAST FLEX | | VEP-1 | VLF | | OSID | Li-ion Tamer | VIS-IR |
| | Void Protection | | | | | | | | | | | | | |
| | Return Air | | | | | | | | | | | | | |
| | Cabinet Protection | | | | | | | | | | | | | |
| | Duct Detection | | | | | | | | | | | | | |
| | Tunnel (cable or other) | | | | | | | | | | | | | |
| | Lift Shaft | | | | | | | | | | | | | |
| | Small Computer Room | | | | | | | | | | | | | |
| | Open Area Protection | | | | | | | | | | | | | |
| | Harsh Environment | | | | | | | | | | | | | |
| | Control Room | | | | | | | | | | | | | |
| | Switch Room | | | | | | | | | | | | | |
| | Restricted Access Room | | | | | | | | | | | | | |
| | In-Rack | | | | | | | | | | | | | |
| | Conveyor | | | | | | | | | | | | | |
| | Special Hazard (CL 1 DIV 2) | | | | | | | | | | | | | |
| | Car Parks (underground) | | | | | | | | | | | | | |

| | |
|---|---|
| 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 |

# VESDA Models Comparison Chart (UL268 7th Edition)

| Features | VESDA-E | | | | | VESDA |
|---|---|---|---|---|---|---|
| | VEU | VEP | | VES | VEA | VLF-500 |
| | | VEP-1 | VEP-4 | | | |
| **Pipes and area coverage** | | | | | | |
| **Pipe Length (Linear)** | 400 m (1,312 ft) | 95 m (312 ft) | 280 m (919 ft) | 280 m (919 ft) | 40 x 100 m (40 x 328 ft) | 50 m (164 ft) |
| **Pipe Length (Branched)** | 800 m (2,625 ft) | 130 m (427 ft) | 470 m (1,542 ft) | 560 m (1,837 ft) | N/A | 60 m (197 ft) |
| **Area Coverage** | 69,965 sq ft * (6,500 m²) | 1,000 m² (10,760 sq ft) | 2,000 m² (21,520 sq ft) | 2.000 m² (21,520 sq ft) | 21,520 sq. ft (2,000 $m^2$) across 40 sample holes | 500 m² (5,380 sq ft) |
| **No. of Pipe Inlets** | 4 | 1 | 4 | 4 | 40 microbore tubes | 1 |
| **Multiple Pipe Addressability** | No | No | | Up to 4 sectors | Up to 40 | No |
| **Sensitivity** | | | | | | |
| **Min Fire 1 Threshold** | 0.0003%obs/ft (0.001%obs/m) | 0.01%obs/m (0.0030%obs/ft) | | 0.01% obs/m (0.0030 obs/ft) | 1.6%obs/m (0.5% obs/ft) | 0.025%obs/m (0.008% obs/ft) |
| **Detection Range** | 0.001 - 20.0%obs/m (0.0003 - 6.575%obs/ft) | 0.005-20%obs/m (0.0015% to 6.575% obs/ft) | | 0.005 - 20%obs/m (0.0015% to 6.575% obs/ft) | 0.020 - 16%obs/m (0.006 - 5.17%obs/ft) | 0.025 - 20%obs/m (0.008 - 6.575% obs/ft) |
| **EN54-20 (Class A / B / C)** | | | | | | |
| **Max. no of Holes** | 96 | 33 | 80 | 98 ** | 40 - 40*** | 16 |
| **Transport time (seconds)** | 70/90/110 | 60/90/110 | | 60/90/90 ** | 40 - 90 (Tube length dependent) | 90/90/90 |
| **Others** | | | | | | |
| **Hazardous Area Approval (FM Class 1, Div 2, Groups A, B, C, D)** | No | Yes | | No | N/A | Yes |
| **IP Rating** | IP40 | IP40 | | IP40 | IP40 | IP30 |
| **Two Stage Filtration** | Yes | Yes | | Yes | Yes | Yes |
| **Total Number of Alarm Thresholds** | 8 (Day/Night) | 8 (Day/Night) | | 32 (Day/Night) | 8 (Day/Night) | 8 (Day/Night) |
| **Relay Outputs** | 7 | 7 | | 12 | 7 (Expandable to 47) | 3 (Expandable to 6) |
| **On-board Memory (Max. Events)** | 20,000 | 20,000 | | 20,000 | 20,000 | 18,000 |
| **AutoLearn™ (Smoke/Flow)** | AutoLearn Smoke AutoLearn Flow | AutoLearn Smoke AutoLearn Flow | | AutoLearn Smoke AutoLearn Flow | No | 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 |

| Features | VESDA-E | | | | | VESDA |
|---|---|---|---|---|---|---|
| | VEU | VEP | | VES | VEA | VLF-500 |
| | | VEP-1 | VEP-4 | | | |
| **Programming Tools**<br>**- On-board Programming module**<br>**- Handheld Programmer**<br>**- PC Software (VSC, VSM)** | Programmed via USB/ Ethernet connection to PC using VSC/VSM4 | Programmed via USB/ Ethernet connection to PC using VSC/VSM4 | | | Programmed via USB/ Ethernet connection to PC using VSC/VSM4 | Programmed via RS232 direct connection to PC using VSC or Programmer when VN card is fitted |
| **StaX Expandability** | Yes | Yes | Yes | Yes | Yes | No |
| **VESDAnet™** | | | | | | |
| **Max. No. of devices/ detectors per loop** | 200/100 | 200/100 | | 200/100 | 200/100 | 200/100<br>(with VN Card) |
| **Max. Distance between Devices** | 1,300 m<br>(4,265 ft) | 1,300 m<br>(4,265 ft) | | 1,300 m<br>(4,265 ft) | 1,300 m<br>(4,265 ft) | 1,300 m (4,265 ft)<br>(with VN Card) |
| **Computer-based Management via VSM** | Yes | Yes | | Yes | Yes | Yes |
| **Remote Relay Modules**<br>**- 7 relay version**<br>**- 12 relay version** | VER-A40-7<br>N/A | VER-A40-7<br>N/A | | VER-A40-7<br>VER-A40-12 | VER-A40-7<br>N/A | VRT-500<br>N/A |
| **Compatible Remote Bargraph Displays**<br>**- Display, 7 relays**<br>**- Display, 12 relays**<br>**- Display, no relays** | VER-A10-7<br>N/A<br>VER-A10-0 | VER-A10-7<br>N/A<br>VER-A10-0 | | VER-A10-7<br>VER-A10-12<br>VER-A10-0 | VRT-200<br>N/A<br>VRT-600 | VRT-V00<br>N/A<br>VRT-W00<br>(with VN Card) |

* 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 | 8.5 mA Max. (Intl.)<br>38.5 mA (Conv.) | 22 mA @ 15 VDC (Intl.)<br>54 mA @10.2 V (Conv.) | 8 mA (31 mA alignment) |
| Voltage range | 15-32 VDC (Intl.)<br>10.2 to 32 VDC (Conv.) | 15-32 VDC (Intl.)<br>10.2 to 32 VDC (Conv.) | 20-30 VDC |

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

# VESDA-E The Next Generation of VESDA Aspirating Smoke Detectors (ASDs)



## Innovative Capabilities

Since pioneering ASD technology more than 30 years ago,VESDA has been recognized as the best in the world, protecting personnel, irreplaceable assets and mission critical infrastructure in the world's most iconic locations.

VESDA-E is the next-generation of ASD technology, featuring multiple innovative capabilities across the new portfolio that delivers a new level of customer experience:

- **VESDA Smoke+**, 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 and 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**, VESDA-E VEA introduces pinpoint addressability to deliver situational awareness to improve response time and efficiency for up to 40 locations.
- **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% for non-addressable products and up to 60% for the point addressable products.

## 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 CMOS imaging, multi-directional light scattering and sophisticated algorithms for smoke detection and particle type characterization. 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 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 Product List

| VESDA-E VEU (UL 268 7th Ed.) | |
|---|---|
|  | The VEU series of ASDs 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 TCO. |
| **Ordering Codes** | **Description** |
| ***VEU-A00-UL*** | VESDA-E VEU with LEDs, Aluminium Enclosure, UL |
| ***VEU-A10-UL*** | VESDA-E VEU with 3.5” Display, Aluminium Enclosure, UL |
| **Approvals:** UL 268 7th edition, ULC, CSFM, FM, FDA, FCC, RCM, KFI | |
| **Dimensions:** 350 x 225 x 135 mm (13.8 x 8.9 x 5.3 in) | |
| **Weight:** VEU-A00-UL - 5.3 kg (11.7 lbs), VEU-A10-UL - 5.3 kg (11.7 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 (UL 268 7th Ed.) | |
|---|---|
|  | 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 achieve consistent performance over their lifetime via absolute calibration. |
| **Ordering Codes** | **Description** |
| ***VEP-A00-1P-UL*** | VESDA-E VEP with LEDs, 1 pipe, Plastic Enclosure, UL |
| ***VEP-A00-P-UL*** | VESDA-E VEP with LEDs, 4 pipe, Plastic Enclosure, UL |
| ***VEP-A10-P-UL*** | VESDA-E VEP with 3.5” Display, 4 pipe, Plastic Enclosure, UL |
| **Approvals:** UL 268 7th edition, ULC, CSFM, FM, FDA, FCC, RCM, KFI | |
| **Dimensions:** 350 x 225 x 135 mm (13.8 x 8.9 x 5.3 in) | |
| **Weight:** VEP-A00-1P-UL: 4.4 kg (9.7 lbs), VEP-A00-P-UL: 4.4 kg (9.7 lbs), VEP-A10-P-UL: 4.5 kg (9.9 lbs) | |
| **Area Coverage:** VEP-A00-1P-UL: 1,000 m² (10,760 ft²), VEP-A00-P-UL and VEP-A10-P-UL: 2,000 m² (21,520 ft²) | |

## VESDA-E VES (UL 268 7th Ed.)



The VESDA-E VES can identify and monitor smoke density by individual sampling pipe (sector) which allows a single zone to be divided into four separate sectors; for example, distinguishing between separate aisles within a data room. Sector addressability enables the user to respond to a potential fire event quickly by reducing the search area. The VESDA-E VES has four programable alarm thresholds (Alert, Action, Fire 1 and Fire 2) per pipe that allows flexible field application. After the detector identifies the first sector to reach the Alert threshold it continues to sample from all sectors to report real time status per sector via the intuitive touch screen display. Built on the Flair detection technology and years of application experience the VESDA-E VES detector delivers very early warning with the best in class dust rejection throughout its lifetime.

| Ordering Codes | Description |
|---|---|
| ***VES-A00-P-UL*** | VESDA-E VES with LEDs, Plastic Enclosure, UL |
| ***VES-A10-P-UL*** | VESDA-E VES with 3.5" Display, Plastic Enclosure, UL |
| **Approvals:** UL 268 7th edition, ULC, CSFM, FM, FDA, FCC, RCM, KFI | |
| **Dimensions:** 350 x 225 x 135 mm (13.8 x 8.9 x 5.3 in) | |
| **Weight:** VES-A00-P-UL: 4.7 kg (10.4 lbs), VES-A10-P-UL: 4.8 kg (10.6 lb) | |
| **Area Coverage:** 2,000 m² (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 (UL 268 7th Ed.)



The VESDA-E VEA series of aspirated detectors combine VESDA reliability and early warning smoke detection with pinpoint addressability and a variety of annunciation options. They use patented air sampling points and multi-channel microbore air-sampling with three alarm sensitivity settings 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 potential sources of fire for faster incident response. The detectors are suitable for protection of areas where pinpoint location of fire events is essential, thus providing ideal fire detection solutions for healthcare, offices, education, retail, prisons and electrical cabinets. A wide range of features provide flexibility, field programmability, enhanced connectivity and reduced TCO.

| Ordering Codes | Description |
|---|---|
| ***VEA-040-A00-UL*** | VESDA-E VEA-40 Detector with LEDs, UL |
| ***VEA-040-A10-UL*** | VESDA-E VEA-40 Detector with 3.5” Display, UL |
| **Approvals:** UL 268 7th edition, ULC, CSFM, FM, FDA, FCC, RCM | |
| **Dimensions:** 352 x 336 x 135.5 mm (13.9 x 13.2 x 5.33 in) | |
| **Weight**: VEA-040-A00-UL: 9.9 kg (21.8 lbs), VEA-040-A10-UL: 10 kg (22.2 lbs) | |
| **Area Coverage:** 3,345 m² (36,005 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 268 7th edition
- CE
- UKCA
- EN 54-20
- ActivFire
- Other major agency approvals 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 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) |
|  | VSP-973 | VESDA-E VEA Pump |
|  | VSP-974 | VESDA-E VEA Rotary Valve |
|  | VSP-975 | VESDA-E VEA LED Front Panel |
|  | VSP-976 | VESDA-E VEA 3.5” Display Front Panel |
|  | VSP-977 | VESDA-E VEA Filter, Pack of 10 |
|  | VSP-978 | VESDA-E VEA Sample Point Head Removal Key |
|  | VSP-979 | VESDA-E VEA Microbore Tube Cutter |

| Product Image | Ordering Code | Description |
|---|---|---|
|  | 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 |
|  | 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 |
| | 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 (500ft) |
|  | 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 |

| Product Image | Ordering Code | Description |
|---|---|---|
|  | 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 |
|  | VSP-1005 | VESDA-E VEA 4mm to 6mm SPL PT Tube Converter |
|  | VSP-1006 | VESDA-E VEA Volumetric Chamber |

## VESDA-E VEU/VEP/VES Accessories

| Product Image | Ordering Code | Description |
|---|---|---|
| | VSP-955 | VESDA-E VES Scanner Manifold |
| | VSP-955-04 * | |
|  | VSP-956 | VESDA-E VEP/VEU Flow Sensor Manifold |
| | VSP-956-04 * | |
|  | VSP-960 | VESDA-E Mounting bracket |
|  | VSP-961 | VESDA-E Exhaust Adaptor US |
|  | 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-964-03 | VESDA-E Smoke Detection Chamber - MK3 |
| | VSP-964-04 * | VESDA-E Smoke Detection Chamber - MK4 |
|  | VSP-965 | VESDA-E Sampling Module |
|  | VSP-966 | VESDA-E VEU-A00 Front Cover - Aluminum - LEDs |
|  | VSP-967 | VESDA-E VEU-A10 Front Cover - Aluminum - LCD - 3.5" Display |
| | VSP-967-04 * | |

| Product Image | Ordering Code | Description |
|---|---|---|
|  | VSP-968 | VESDA-E VEP-A00-P/ VEP-A00-1P/ VES-A00-P Front Cover - Plastic - LEDs |
|  | VSP-969 | VESDA-E VEP-A10-P Front Cover - Plastic - LCD - 3.5" Display |
| | VSP-969-04 * | |
|  | VSP-969-S | VESDA-E VES-A10-P Front Cover - Plastic - LCD - 3.5" Display |
| | VSP-969-04-S * | |

* New spare parts for GA4 only.

## VESDA-E Remote Accessories



The VESDA-E Remote Accessories are the next generation of ancillary devices designed to complement VESDA-E ASDs 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.

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

The remote modules are designed to be assembled, on site, onto a 19" subrack which accommodates up to 4 remote modules. The highly flexible subrack configuration is enabled by a modular ordering system for expedient out-of-box installation in the field.

| Product Image | Ordering Code | Description |
|---|---|---|
| **Remote Modules** | | |
|  | VER-A10-0 | Remote Module Display (No Relays) |
| | VER-A10-7 | Remote Module Display (7 Relays) |

| Product Image | Ordering Code | Description |
|---|---|---|
|  | VER-A10-12 | Remote Module Display (12 Relays) |
|  | VER-A30 | Remote Module VESDAnet/Ethernet/USB (No Relays) |
|  | VER-A40-7 | Remote Module (7 Relays) only |
| | VER-A40-12 | Remote Module (12 Relays) only |
| **Subrack Modules** | | |
|  | VEK-A10-0 | Subrack Kit Display (No Relays) |
| | VEK-A10-7 | Subrack Kit Display (7 Relays) |
| | VEK-A10-12 | Subrack Kit Display (12 Relays) |
| | VEK-A30 | Subrack Kit VESDAnet/Ethernet/USB (No Relays) |
| | VEK-A40-7 | Subrack Kit (7 Relays) |
| | VEK-A40-12 | Subrack Kit (12 Relays) |
| | VEK-0000 | Subrack 19" |
| | VEK-0 | Subrack Kit Blank Plate |

## Detector Enclosures

| Product Name and Image | Ordering Code | Description |
|---|---|---|
|  Detector Enclosure | 020-050-E | This IP66enclosure is built to accommodate either a VESDA-E VEU, VESDA-E VEP, VESDA-E VES or VESDA VLF detector. The enclosure has a hinged door for easy access for installation and maintenance which includes a glass window to view the onboard display. It includes predrilled holes for inlet and exhaust ports and cable entries so that installation of a detector is a simple process requiring minimum tools. Moreover the enclosure is supplied with pipe fitting to ensure that the IP66 integrity of the enclosure is maintained. |

## VESDA-E Demo Kits

| Ordering Code | Description |
|---|---|
| VKT-855 | VESDA-E VES Demo Kit |

# VESDA ASD




## 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.

## 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).

## Applications

- IT and Communications
- Highrise and Residential
- Manufacturing
- Airport
- Railway
- Car Parks (underground)
- Logistics/ Warehouse
- Logistics/ Cold Storage
- Correctional Facilities
- Cultural and Heritage
- Power Generation
- Control/Switch Rooms
- Retail and Commercial
- Oil and Gas
- Waste Recycling
- Mining

# VESDA Product List

| VESDA VLF-500 (UL 268 7th Ed.) | |
|---|---|
|  | The VESDA VLF-500-UL early warning air sampling smoke detector incorporates world leading VESDA very early warning laser based aspirated smoke detection technology. It provides localized fire risk management solutions for small, critical environments. The VLF-500-UL monitors areas up to 500 m² (5380 sq. ft.) dependant on local codes and standards. The VESDA VLF complements the existing VESDA detector range and has been designed to provide simple installation and commissioning, absolute smoke detection and reliable and consistent response to smoke events without being affected by false alarms. |
| **Ordering Codes** | **Description** |
| ***VLF-500-00-UL*** | VESDA VLF-500-00-UL. European language set, English display labels. |
| ***VLF-500-02-UL*** | VESDA VLF-500-02-UL. VESDA VLF-500 DET DISP ICON+ENG ASIAN UL. International display labels. |
| **Approvals:** UL 268 7th edition, ULC, FM, CSFM, FDA, FCC, RCM | |
| **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 Accessories List

## Remote Mount Configuration (VRT) - Single Box

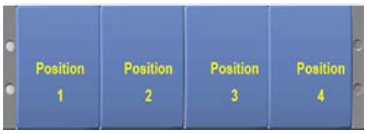
| Product Image | Ordering Code | Description |
|---|---|---|
|  | VRT-100 | Programmer. Includes remote termination card with no relays. |
|  | VRT-200 | VESDA VLP with a remote termination card. Display. 7 Relays |
| | VRT-600 | VESDA VLP with a remote termination card. Display. No Relays |
|  | VRT-400 | 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-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.<br>7 Relays version for VLP, VLF, or VLC |
| | VRT-E00 | Includes blank plate with a remote mounting box.<br>7 Relays version for VLS |
| | VRT-900 | Includes blank plate with a remote mounting box.<br>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. |

**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 | Description |
|---|---|---|
| <br>Sub Rack Enclosure | VRE-100 | 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. |
| <br>Detector Enclosure | 020-050-E | The 020-050-E is a specific version that is built to complement the VESDA range of detectors, it accommodates either a VESDA-E VEU, VESDA-E VEP, VESDA-E VES or VESDA VLF detector. |

## 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 (Code 2-1-0-0): 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 (Code 4-4-2-3): 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.

| Code | Description |
|---|---|
| 0 | Blank plates |
| 1 | Programmer with remote termination card - no relays |
| 2 | Standard display with 7 relay remote termination card |
| 3 | VESDAnet Socket |
| 4 | Scanner display with 7 relay remote termination card |
| 5 | 7 relay remote termination card and relay processor |
| 6 | Standard display with remote termination card - no relays |
| 7 | Scanner display with remote termination card - no relays |
| 8 | Scanner display with 12 relay remote termination card |
| 9 | 12 relay remote termination card and relay processor |
| A | Programmer sharing adjacent termination card |
| Q | VLI display with 7 relays |
| T | VLI display with no relays |
| V | VLF display with 7 relay remote termination card |
| W | VLF display without relays |

## VESDAnet and Relay Cards

| Product Image | Ordering Code | Description |
|---|---|---|
|  | VIC-010 | VESDAnet Interface Card (VIC) - a simple interface card for the range of VESDA VLF smoke detectors.<br>It provides seamless VESDAnet communication from the detector to other VESDAnet devices, including configuration and monitoring tools. |
|  | VIC-020 | VESDA VLF Multi-function Control Card (MCC) for the range of VESDA VLF smoke detectors. It provides additional 2 relays and 1 General Purpose Input (GPI). |
|  | VIC-030 * | VESDA VLF MCC with Monitored Powered Output (MPO) for the range of VESDA VLF smoke detectors. It provides all the features of the VIC-020 with an additional Relay which can be programmed as an MPO. |

* Not approved for UL or ULC installations.

# Programming Options



The 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 port
- RS485 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<br>RS232 Interface<br>For Xtralis VSM4 and Xtralis VSC Software |
| | VHX-0300 | Open Protocol<br>Peer to Peer HLI. RS232<br>Interface for connection to a BMS or Fire Panel |
| | VHX-0310 | Open Protocol<br>Master - Slave HLI. 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<br>Peer-to-Peer |
| | VHX-1310 | Wall-mounted Open Protocol<br>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

| Product Image | Part Number | Description |
|---|---|---|
|  | 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-018 | Filter Switch |
|  | VSP-019 | Filter Cover |
| | VSP-020 | VLP and VLS Screw Covers - Pack of 2 |
|  | VSP-021 | Metric to Imperial Pipe Adapters, pack of 4 |
| | VSP-022 | Mounting box detector |
|  | VSP-025 | Filter Cartridge, pack of 20 |
| | VSP-030 | VESDA VLI Intelligent Filter |
| | VSP-031 | VESDA VLI Secondary Foam Filter |

| Product Image | Part Number | Description |
|---|---|---|
|  | VSP-032 | VESDA VLI Aspirator |
| | VSP-033 | VESDA VLI Chamber Assembly |
|  | VSP-034 | VESDA VLI VESDAnet Card |
|  | VSP-035 | VESDA VLI Remote Display Module |
|  | VSP-036 | VESDA VLI Ultrasonic Flow Manifold |
| | 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-511 | VESDAnet RS-485 15-way cable |
| | 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 |

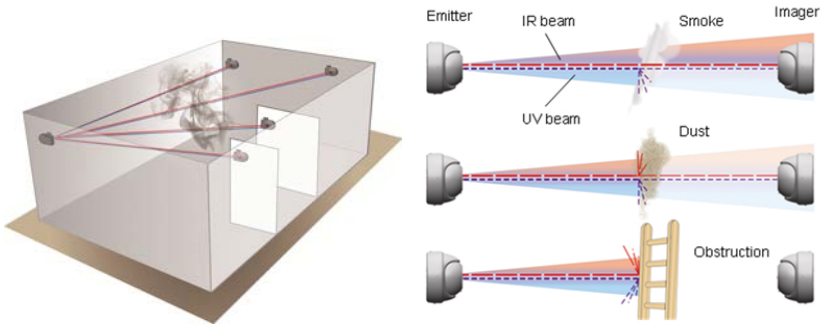
# OSID Open-Area Smoke Imaging Detection



## 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.

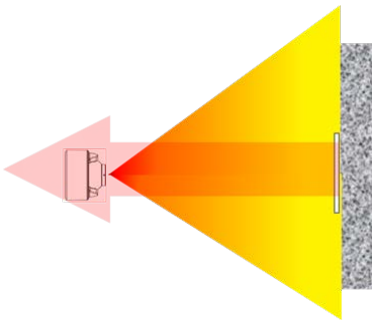
**True spatial detection**




## 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 Product List

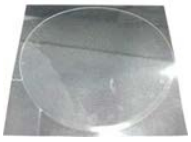
| OSID-DE | |
|---|---|
|  | OSID-DE is a new innovation in projected beam smoke detection technology. By using advanced dual wavelength projected beams and optical imaging technology for early warning smoke detection, OSID-DE provides a low-cost, reliable and easy-to-install solution that overcomes 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 |
| ***OSE-HP-01**** | Emitter - High Power, Alkaline Battery |
| **Approvals:** UL, ULC, FM, CSFM, FCC, FDA, CCCF, ActivFire, VdS, NF-SSI (AFNOR), BOSEC, CE - CPR and EMC, UKCA | |
| **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 | |

* UL evaluation is pending.

| 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) | |

# OSID Accessories List

## OSID-DE Accessories

| Product Image | Ordering Code | Description |
|---|---|---|
|  | OSID-INST | OSID Installation Kit |
|  | OSID-EHE | Emitter environmental housing IP66 |
|  | OSID-EHI | Imager environmental housing IP66 |
|  | OSP-001 | FTDI Cable 1.5m |
|  | OSP-002 | Laser Alignment tool<br>(Contains one handle and two alignment tool shafts; for OSID-DE and OSID-R) |
|  | OSID-WG | Wire Guard for Imager and Emitter |
|  | OSE-RBA | Spare alkaline battery pack for Emitter units |
|  | 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 |
|  | RTS151KEY | Imager Reset Station Flush Mount |

| Product Image | Ordering Code | Description |
|---|---|---|
|  | RTS151 KIT | Imager Reset Station Surface Mount |

## OSID-R Accessories

| Product Image | Ordering Code | Description |
|---|---|---|
|  | OSP-002 | Laser Alignment tool<br>(Contains one handle and two alignment tool shafts; for OSID-DE and OSID-R) |
|  | OSP-004 | Test filter - 10 pack |
|  | RTS151KEY | Test and reset station for flush mount |
|  | RTS151 KIT | Test and reset station for surface mount |
|  | BEAMHKR | Heater kit for the reflector |
|  | 6500-MMK | Multi–mount accessory for ceiling or wall mounting with additional mounting adjustment |
| | OSI-RWG | Wire guard for<br>OSID-R range detectors |

## OSID-DE Software

| Software | Description |
|---|---|
| <br>OSID-DE Diagnostic Tool | 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.<br>**Ordering Info:** OSID-DE Diagnostic Tool is available for download from www.xtralis.com. |
| <br>OSID-DE Selection Assistant | 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.<br>**Ordering Info:** Available for download from www.xtralis.com. |

# Aspirating Smoke Detection Combined with Gas Monitoring



## ASD with Gas Detection and Environmental Monitoring

As the world's leading manufacturer of ASD solutions, Xtralis has introduced the VESDA Sensepoint XCL gas detector that connects to Xtralis ASD systems to deliver superior gas detection via multiple hole (multi-point) sampling.

VESDA Sensepoint XCL:

- 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 Fire Alarm Control Panel (FACP)/ PLCs/ HVAC/ BMS
- VSC and VSM4 integration for remote access to detectors (Modbus version) operating status

## 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

## How VESDA Sensepoint 301C Gas Controller and VESDA Sensepoint 301R Relay Module X8 Works

The VESDA Sensepoint 301C Gas Controller enables centralised configuration and monitoring of VESDA Sensepoint XCL – Large & Micro Bore (Modbus) gas detectors.

The controller connects up to 96 VESDA Sensepoint XCL (Modbus version) detectors and provides 4 programmable relays (alarms, faults) for installations requiring additional relay outputs – additional 16 relay outputs can be provided through the VESDA Sensepoint 301R X8 Relay Module.

# VESDA Sensepoint XCL Products List

## VESDA Sensepoint XCL- Micro Bore ASD System



Xtralis the manufacturer of the market leading VESDA 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/UL/IEC61010-1
- Certified to CSA-C22.2 No. 61010- 1-12

- **CE - EMC**
  - EN 50270
- **RADIO**
  - RED, FCC, BT SIG
- **OTHERS**
  - UL2075 (CO and $CH_4$), 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 |

**Approvals:**

**Electrical Safety**

- Conforms to EN/UL/IEC61010-1
- Certified to CSA-C22.2 No. 61010- 1-12

- **CE - EMC**
  - EN 50270
- **RADIO**
  - RED, FCC, BT SIG
- **OTHERS**
  - UL2075 (CO and $CH_4$), 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-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, $O_2$, $H_2S$, $NO_2$, $H_2$ |
| 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 - $H_2S$ 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 |

# VESDA Sensepoint Gas Controller and Relay Module Products List

## VESDA Sensepoint 301C Gas Controller



The VESDA Sensepoint 301C Gas Controller enables centralised configuration and continuous monitoring of VESDA Sensepoint XCL – Large & Micro Bore (Modbus) gas detectors.

The controller uses an addressable RS-485 communication protocol, (daisy chain wiring) that connects up to 96 VESDA Sensepoint XCL (Modbus version) detectors, it provides 4 programmable relays (alarms, faults) for VESDA Sensepoint XCL gas detector installations requiring additional relay outputs – additional 16 relay outputs can be provided through the (optional) VESDA Sensepoint 301R Relay Module x8.

The controller offers automatic sensor identification and unique zoning capabilities permitting the grouping of multiple VESDA Sensepoint XCL detectors gas readings giving the flexibility to match the needs of different installations.

| Ordering Codes | Description |
|---|---|
| ***XCL-301C-CTR*** | VESDA Sensepoint 301C Gas Controller |

**Approvals:**

- ANSI/UL 61010-1
- CAN/CSA C22.2 No. 61010-1.
- IEC 61010-1:2010
- ETL 116662
- California Title 24, Part 6, and associated administrative regulations In Part 1

**Dimensions:** 280 x 203 x 70 mm (11 x 8 x 2.8 in)

**Weight:** 1.1 kg (2.4 lbs)

## VESDA Sensepoint 301R Relay Module



The VESDA Sensepoint 301R Relay Module X8 connects to the daisy chain network installation (RS-485) and acts as an output to the VESDA Sensepoint 301C Gas Controller.

It provides an extra 8 relays at programmable alarm levels.

| Ordering Codes | Description |
|---|---|
| ***XCL-301R-RMD*** | VESDA Sensepoint 301R Relay Module X8 |

**Approvals:**

- UL STD. 1244
- AN/CSA C22.2 No 205

**Dimensions:** 244 x 203 x 57 mm (9.5 x .8 x 2.5 in)

**Weight:** 1.09 k g (2.4 lb)

# Li-ion Tamer GEN 3 Lithium Ion Off-Gas Detection System




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 (LIB). 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.

### Applications

- Stationary Battery Energy Storage
  - Containerized / modular systems
  - Built environment systems
- Data Centers
  - Battery UPS
- Manufacturing - Gigafactories
  - 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

# Li-ion Tamer Product List

| Li-ion Tamer GEN 3 | | | |
|---|---|---|---|
|  | The Li-ion Tamer GEN 3 system is a safety product that has been developed for the protection of lithium-ion batteries. The key to Li-ion Tamer's GEN 3 value proposition is the earliest warning of battery failures by monitoring for single cell off-gas events and the scalable deployment of gas sensors for cost effective protection of battery installations. Additionally, temperature and relative humidity measurements provide environmental sensing at every sensing node. | | |
| **Product Image** | **Ordering Codes** | **Item** | **Description** |
|  | ***LT-SEN-M3*** | Monitoring Sensor, GEN 3 | Mounted on/near Li-ion battery rack to detect off-gas from cells |
|  | ***LT-SEN-R3*** | Reference Sensor, GEN 3 | Mounted around the ESS |
|  | ***LT-ACC-HUB-PWR*** | Hub, Direct Power, GEN 3 | Originates daisy-chain connection with sensors, powered directly with 12 VDC terminal block, includes terminator |
|  | ***LT-ACC-HUB-POE*** | Hub, PoE, GEN 3 | Originates daisy-chain connection with sensors, powered via PoE, includes terminators |
| | ***LT-ACC-HUB-MKT*** | Hub DIN-Rail Mount Kit | DIN rail mounting kit for the hubs |
|  | ***LT-CTR-SML*** | Controller, GEN 3 | Controller that aggregates up to 100 sensor signals and generates integrate-able outputs. |
| | ***LT-CTR-SML-DMK*** | Controller DIN-Mount Kit | DIN rail mounting kit for controller |
| | ***LT-ACC-POE-4*** | Ethernet Switch, PoE, 4 ports | PoE Ethernet switch for powering and transmitting signals from the Hub, PoE |
| | ***LT-ACC-POE-24*** | Ethernet Switch, PoE, 24 ports | |
|  | ***LT-ACC-POE-24-ADR*** | PoE Switch 24 port, IEC Power Adapter | IEC plug to screw terminal adapter for the Ethernet Switch, PoE, 24 port |

| | | | |
|---|---|---|---|
|  | ***LT-ACC-ETS-5*** | Ethernet Switch, 5 Ports | Ethernet switch for transmitting TCP/IP signals between system components |
|  | ***LT-ACC-ETS-8*** | Ethernet Switch, 8 Ports | |
|  | ***LT-ACC-ETS-16*** | Ethernet Switch, 16 Ports | Ethernet switch for transmitting TCP/IP signals between system components |
|  | ***LT-ACC-ERO-16*** | Ethernet Relay Module, 16 Ports | Ethernet relay module with 16 SPDT Form C Relay terminals |
|  | ***LT-ACC-ERO-MKT*** | Relay Output DIN-Rail Mount Kit | DIN rail mounting kit for the relay module |
|  | ***LT-ACC-PWR-12*** | Power Supply, 12VDC | Power supply for system with 12VDC |
| | ***LT-ACC-PWR-48*** | Power Supply, 48VDC | Power supply for system with 48VDC |
|  | ***LT-ACC-SAK*** | Spare Kit - 4xTerminator 1xScrew Terminal Adapter | Spare Kit – 4x terminators 1x barrel plug to screw terminal adapter |
|  | ***LT-ACC-NCL-3*** | 3 ft (~1 m) Network Cable | Shielded RJ45 connector cable used to connect sensors, hubs, ethernet switches, and controllers |
| | ***LT-ACC-NCL-5*** | 5 ft (1.5 m) Network Cable | |
| | ***LT-ACC-NCL-10*** | 10 ft (3 m) Network Cable | |
| | ***LT-ACC-NCL-25*** | 25 ft (7.6 m) Network Cable | |
| | ***LT-ACC-NCL-50*** | 50 ft (15 m) Network Cable | |
| | ***LT-ACC-NCL-100*** | 100 ft (30 m) Network Cable | |
|  | ***LT-ACC-TST*** | DEC Bump Test Bottle | A plastic bottle with a small amount of DEC for use during bump testing of sensors |

| | | | |
|---|---|---|---|
|  | ***LT-DKT*** | Demo Kit, GEN 3 | Case comprising representative system components |
| **Approvals:**<br>• FM 6540 Approved for Battery Electrolyte Solvent Vapours (ex. DEC, DMC, EMC)<br>• ETL listed to UL 61010 and CSA 22.2 NO. 61010 for product safety<br>• EN 61326-1:2013 for EU Directive (2014/30/EU)<br>• RoHS 3 EU 2015/863, WEEE and REACH compliant<br>• UKCA<br>• FCC | | | |
| **Controller's Dimensions:** 115mm x 82mm x 34mm | | | |

## Li-ion Tamer Sensor MOS




The Li-ion Tamer Sensor MOS is a device that detects 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. It is also capable of detecting 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.

| Product Image | Ordering Codes | Description |
|---|---|---|
|  | ***LT-SEN-MOS*** | Li-ion Tamer Sensor MOS<br>(Comprises LT-SEN-M and LT-SEN-IM-UL) |
| | ***LT-SEN-MOS-C49*** | Li-ion Tamer Sensor MOS-C49<br>(Comprises LT-SEN-M-C49 and LT-SEN-IM-UL) |
|  | ***LT-SEN-M*** | Li-ion Tamer Gen 2+ Sensor |
| | ***LT-SEN-M-C49*** | Li-ion Tamer Gen 2+ Sensor-C49 |
|  | ***LT-SEN-IM-UL*** | Li-ion Tamer Interface Module UL |

**Approvals - Off-Gas Sensor:**

- UL 2075 and ULC 588 Recognized for Hydrogen ($H_2$) detection
- UL 2075 and ULC 588 Recognized for Carbon Monoxide (CO) detection*
- UL 2075 and ULC 588 Recognized for Battery Electrolyte Solvent Vapour detection
  Includes Diethyl Carbonate (DEC), Dimethyl Carbonate (DMC), and Ethyl Methyl Carbonate (EMC)
- FM 6540 Approved for Battery Electrolyte Solvent Vapours (ex. DEC, DMC, EMC)**
- 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)
- CE
- UKCA
- FCC
- CSFM (according to UL 2075 for $H_2$)

**Approvals - Interface Module:**

- Certification of fire alarm system module UL864 10th
- ULC S527
- FM 6540
- Safety UL61010-1
- RoHS EN50581-2002
- EMI EN55011-2010
- EMC EN61326-1-2021

**Interface Module's Dimensions:** 140mm (L) x 85mm (W) x 34mm (H)

* Available on selected models.

** Model (LT-SEN-M) only.

## Li-ion Tamer Software

| Software | Description |
|---|---|
|  Li-ion Tamer Interface Module Config Software | Setup and commissioning of the Li-ion Tamer Sensor MOS is done by the Interface Module configuration tool “Li-ion Tamer Interface Module Config Software”. With the configuration tool, the user can read the current status of the Li-ion Tamer Sensor MOS Firmware version, Modbus address and Alarm relay configuration. The user also has the option to change the address of the Interface Module in a network, and change the configuration of the Alarm relay from its default settings.<br><br>This Config Software is available for download from www.xtralis.com. |

# Xtralis VIS-IR Failsafe Bi-Spectral Thermography Detector



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 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.

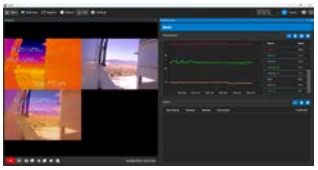
## Applications

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

# Xtralis VIS-IR Products List

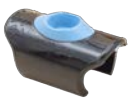
| Xtralis VIS-IR Failsafe Bi-Spectral Thermography Detector | |
|---|---|
|  | Xtralis VIS-IR is a Failsafe bi-spectral standalone smart edge detector that has been specifically designed for early warning heat-detection with immediate visual verification using ViSM (VIS-IR Software Management tool).<br><br>Xtralis VIS-IR communicates directly with any industry standard FACP using on-board Pre-Alarm, Alarm and Fault relays avoiding the ever-present failure risk associated with traditional smoke/fire detectors that cannot perform detection on the edge, and cannot cope with high smoke and dust conditions as part of normal operating conditions. |
| **Ordering Codes** | **Description** |
| ***FTD-2216-S*** | Failsafe Bi-Spectral Thermography Detector FOV 22°x16°, Shutter |
| ***FTD-4231-S*** | Failsafe Bi-Spectral Thermography Detector FOV 42°x31°, Shutter |
| ***FTD-8865-S*** | Failsafe Bi-Spectral Thermography Detector FOV 88°x65°, Shutter |
| ***FTD-BB-1*** | Black Body for Maintenance Purposes |
| **Approvals:**<br>• CNPP<br>• EMC EN61000-6-1 (2017)<br>• EMC EN61000-6-3 (2007) / A1 (2001) /AC (2012)<br>• EMC EN 50130-4 (2011) / A1 (2014)<br>• UNE-EN 62368-1:2014 + AC1:2015 + AC2:2015<br>• EN 62368-1:2014+AC:2015+AC:2017 +A11:2017<br>• IEC 62368-1:2014+COR1:2015+COR2015<br>• POSE000_18<br>• FCC Rules and Regulations CFR 47, Part 15 | |
| **Weight:** 1.75 kg | |

## Xtralis VIS-IR Software

| Software | Description |
|---|---|
| <br>VIS-IR Software Management (ViSM) | Xtralis ViSM can be used to configure up to 8 cameras (one by one, not simultaneously) and give 8 feeds possibilities for monitoring purposes through laptop in real time. It is easy-to-use and has been designed to provide operator complete control. The software allows to set the detection ROI, different detection area settings (spot, line, polygons, etc.), pre-alarm and alarm levels, color scheme selection, logging and communication. While the detectors fully operate on their own, very useful diagnostic data can be collected from the detectors for further analysis.<br><br>ViSM is available for download from www.xtralis.com. |

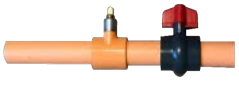
# Pipes and Fittings

| Product Image | Ordering Code | Country | Description |
|---|---|---|---|
|  | VP-P-105 | US | Pipe - ¾" (105 ft. kit) |
| | VP-P-200 | US | Pipe - ¾" (200 ft. kit) |
| | 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. |
|  | E700-TUBE | US | Polyethylene tubing, black. 1/2" OD x 3/8" ID, FPE rated |
| | TUBING-250 | US | Polyethylene tubing, black. 1/2" OD x 3/8" ID, FPE rated |
|  | VT-Tube-500 | US | 1/4" UL Listed Flame Retardant microbore tubing for use with VFT-15 detector (500 ft) |
| | VT-Tube-1000 | US | 1/4" UL Listed Flame Retardant microbore tubing for use with VFT-15 detector (1000 ft) |
|  | VP-CUTTERS | US | CPVC Pipe Cutters. cuts up to 1 1/2" pipe |
|  | VP-EC | US | End Cap, 3/4" CPVC |
|  | 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-ELB-90 | US | 3/4", Socket to Socket, 90°, CPVC Elbow |
|  | VP-TEE | US | 3/4" CPVC Pipe Tees |
|  | VP-TEE-FPT | US | Tee, 3/4" x 1/2" FPY, Pack of 10 |

| Product Image | Ordering Code | Country | Description |
|---|---|---|---|
|  | VSP-878 | | Push-in Connect Adaptor Kit for ½" capillary tubing |
|  | F-PC-0 | | Sampling Hole Clip, Pack of 5, Black Hole & Tab |
|  | F-PC-2 | | Sampling Hole Clip, 2.0mm (5/64") Hole Size, Pack of 5, Red Hole |
|  | F-PC-2.5 | | Sampling Hole Clip, 2.5mm (6/64") Hole Size, Pack of 5, Red Hole & Tab |
|  | F-PC-3 | | Sampling Hole Clip, 3.0mm (1/8") Hole Size, Pack of 5, Orange Hole |
|  | F-PC-3.5 | | Sampling Hole Clip, 3.5mm (9/64") Hole Size, Pack of 5, Orange Hole & Tab |
|  | F-PC-4 | | Sampling Hole Clip, 4.0mm (5/32") Hole Size, Pack of 5, Yellow Hole |
|  | F-PC-4.5 | | Sampling Hole Clip, 4.5mm (11/64") Hole Size, Pack of 5, Yellow Hole & Tab |
|  | F-PC-5 | | Sampling Hole Clip, 5.0mm (13/64") Hole Size, Pack of 5, Green Hole |
|  | F-PC-5.5 | | Sampling Hole Clip, 5.5mm (7/32") Hole Size, Pack of 5, Green Hole & Tab |
|  | F-PC-6 | | Sampling Hole Clip, 6.0mm (15/64") Hole Size, Pack of 5, Blue Hole |

| Product Image | Ordering Code | Country | Description |
|---|---|---|---|
|  | F-PC-6.5 | | Sampling Hole Clip, 6.5mm (1/4”) Hole Size, Pack of 5, Blue Hole & Tab |
|  | F-PC-HE-2 | | Sampling Hole Clip, 2.0mm (5/64”) Hole Size, Pack of 5, Red Hole |
|  | F-PC-HE-2.5 | | Sampling Hole Clip, 2.5mm (6/64”) Hole Size, Pack of 5, Red Hole & Tab |
|  | F-PC-HE-3 | | Sampling Hole Clip, 3.0mm (1/8”) Hole Size, Pack of 5, Orange Hole |
|  | F-PC-HE-3.5 | | Sampling Hole Clip, 3.5mm (9/64”) Hole Size, Pack of 5, Orange Hole & Tab |
|  | F-PC-HE-4 | | Sampling Hole Clip, 4.0mm (5/32”) Hole Size, Pack of 5, Yellow Hole |
|  | F-PC-HE-4.5 | | Sampling Hole Clip, 4.5mm (11/64”) Hole Size, Pack of 5, Yellow Hole & Tab |
|  | F-PC-HE-5 | | Sampling Hole Clip, 5.0mm (13/64”) Hole Size, Pack of 5, Green Hole |
|  | F-PC-HE-5.5 | | Sampling Hole Clip, 5.5mm (7/32”) Hole Size, Pack of 5, Green Hole & Tab |
|  | F-PC-HE-6 | | Sampling Hole Clip, 6.0mm (15/64”) Hole Size, Pack of 5, Blue Hole |
|  | F-PC-HE-6.5 | | Sampling Hole Clip, 6.5mm (1/4”) Hole Size, Pack of 5, Blue Hole & Tab |
|  | VP-CLIP-US | US | 3/4" pipe support clamp |

| Product Image | Ordering Code | Country | Description |
|---|---|---|---|
|  | PIP-039 | | Air exhaust silencer |
|  | E700-SP | US, ANZ | Sampling point for Capillary tube end |
|  | VSP-877 | | Flush Mount Sampling Point |
|  | VSP-877-B | | Flush Mount Sampling Point, Black |
|  | VSP-877-G | | Flush Mount Sampling Point, Grey |
|  | VSP-610 | | Tamper Proof Sampling Point<br>Metric measurements |
| | VSP-610-US | US | Tamper Proof Sampling Point, 1" / 25 mm rigid of flexible conduit.<br>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-850-G | | Xtralis In-Line Filter, Grey |
|  | VSP-850-R | | Xtralis In-Line Filter, Red |
| | VSP-855-4 | | Xtralis In-Line Filter Elements, Pack of 4 |
| | VSP-855-20 | | Xtralis In-Line Filter Elements, Pack of 20 |
|  | VP-CEMENT | US | Solvent Cement |
|  | VP-BV | US | Ball Valve, 10 per box |
|  | 128-014-XTR | | VESDA Sampling Point Label, Pack of 100 |

| Product Image | Ordering Code | Country | Description |
|---|---|---|---|
|  | 128-015 | | VESDA Pipe Labels without Hole for Sampling (100 per Roll) |
|  | E700-SP-DCL | | Sampling Point Decal, Wrap Around Style (200 per Roll).<br>Place center area over sampling point and wrap decal around diameter of pipe. |
|  | E700-SPLR-DCL | | VESDA sampling point wrap around labels (200 per roll) |
|  | E700-SPLR | | Miniature sampling point label, round style, Red |
|  | E700-SPLG | | Miniature sampling point label, round style, Grey |
|  | E700-SP-DCL-PNT | | Round style point labels, White |
|  | E700-SP-DCL-PIPE | | Sampling pipe labels (35 per Roll) |
|  | VSP-860 | | Refrigerated Storage Sampling Kit (c/w upper and lower VSP-860 fixing flange)<br>** Please ensure PIP-008 (T-Piece) is also used.* |
| | VSP-860-US | US | Refrigerated Storage Sampling Kit - US |
|  | VSP-870 | | In-line Flow Restrictor Assembly<br>*Compatible with VSP-610* |
| | VSP-870-US | US | In-line Flow Restrictor Assembly - US<br>*Compatible with VSP-610-US.* |
|  | VSP-871 | | Flow Restrictor Disc, Pack of 10<br>*Compatible with VSP-610 and VSP-610-US.* |
|  | VSP-COT-KIT | US | Clean Out Tee Kits |
|  | E700-CAP KIT | US | 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 | US | 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) |

# Power Supplies

## VESDA-E VEA Power Supplies

| | VPS-VEA-115UL | VPS-VEA-230UL |
|---|---|---|
| |  | |
| Nominal AC Supply Voltage | 120VAC/2.0A/60Hz | 230VAC/1.0A/50Hz |
| Output Current | 27VDC/2.8A Continuous<br>27VDC/5A Alarm | |
| Dimensions (W x H x D) | 438 mm x 330 mm x 142 mm | |
| Weight | 5.9Kg (13lbs) without batteries | |
| Approvals | UL, UL 864 listed, ULC-S527, CSFM | |

## US Power Supplies

| | VPS-100US-UL | VPS-300US-UL* | VBC-001** |
|---|---|---|---|
| |  | |  |
| Input Voltage | 120 VAC/60 Hz/1.4 A Max.<br>or<br>220 VAC/60 Hz/0.9 A Max. | | - |
| Output Voltage | 24 VDC (Nominal)<br>Special Applications, Voltage Output Range:<br>19.96-27.54 VDC<br>Maximum Total Available Output Current: 1.5A<br>Maximum Output Current per Circuit: 1.2 A*** | | - |
| Dimensions (W x H x D) | 14 in. x 9.5 in. x 4.5 in.<br>(355.6 mm x 222.3 mm x 114.3 mm) | | 13.9 in. x 9 in. x 4.5 in. |
| Weight | 7.9 lbs.(3.6 kg) without batteries | 13.9 lbs (6.3 kg) without batteries | 6 lbs. (2.7 kg) without batteries |
| Compatible Devices | • VESDA-E Detectors: VEU, VEP and VES series<br>• VESDA Detectors: VLF, VLI, VLP, VLC and VLS series<br>• VESDA/ VESDA-E Remote Accessories<br>• OSID Beam Detectors<br>• VESDA Sensepoint XCL | | |
| Approvals | UL 864, ULC-S527 | | |

* Kit for VPS-100US-UL power supply plus the VBC-001 battery cabinet.

** VBC-001 is a battery cabinet that takes up to 6 batteries, 12 VDC, 12 Amp/h.

*** With three output circuits equally loaded, the maximum per circuit output current is 500 mA.

# Test and Commissioning Tools

Xtralis Test Transformer VTT-10000 is a tool used to test very early warning ASD equipment. It is used with VESDA-E, VESDA and FAAST FLEX.

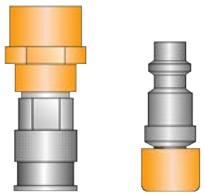
## Test Transformer

| Product Image | Ordering Code | Description |
|---|---|---|
|  | VTT-10000-USA | VESDA Test Transformer (Wire Burner)<br>Previously known as the Hot Wire Test.<br>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, 100m |

## Smoke Pen

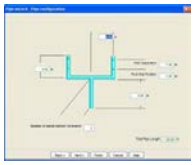
| Product Image | Ordering Code | Description |
|---|---|---|
|  | VSP-810 | Smoke Pen with 6 wicks |
|  | VSP-811 | Smoke Pen Refill Pack of 6 Wicks |

## General Tools

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

# Software

## 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.<br>**Ordering Info:** ASPIRE is available for download from www.xtralis.com. |
| **Supported Products** | **VESDA-E**<br>• VESDA-E VEU<br>• VESDA-E VEP<br>• VESDA-E VES<br>**VESDA**<br>• VESDA Sensepoint XCL<br>• VESDA VLP<br>• VESDA VLF-250<br>• VESDA VLF-500<br>• VESDA VLI<br>• VESDA VLP<br>• VESDA VLS<br>**FAAST FLEX** |

## 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.<br>**Ordering Code:** VSW-100 |
| **Supported Products** | **MODBUS**<br>• VESDA Sensepoint XCL<br>• VESDA ECO<br>**VESDAlink**<br>• VESDA VLC LP Phase 1<br>• VESDA VLC Ro Phase 1<br>• VESDA VLC Simplex Phase 2<br>• VESDA VLC 800-MX Phase 2<br>• VESDA VLC ESSER Phase 2<br>• VESDA VLC AP Phase 2<br>**VESDAnet**<br>• VESDA VLP<br>• VESDA VLS<br>• VESDA VLC<br>• VESDA VLF<br>• VESDA VLC<br>• VESDA VLS<br>• VESDA VLI<br>• VESDA-E VEU<br>• VESDA-E VEP<br>• VESDA-E VEA<br>• VESDA-E VES<br>• Remote Relay<br>• VESDA Display<br>• System Relay Module<br>• VLS Remote Relay<br>• VLS Display<br>• VESDA Programmer<br>• VESDA Sliding Windows HLI<br>• VESDA Stop-and-go HLI<br>• VESDA Open protocol HLI<br>• VESDA Sliding Windows HLI with Dial Out<br>• Analog Output Module<br>• VESDA ModBus HLI<br>• VESDA Access HLI<br>• VESDA MODBUS3 HLI<br>**VESDAtalk**<br>• VESDA VLF<br>• VESDAnet Card<br>• Multifunction 020 Control Card<br>• 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.<br>Note: To correctly specify (order) the Xtralis VSM4 product, the following must be taken into consideration for each particular Xtralis VSM4 application.<br>1. What are the total number of Monitoring PC's. 1 Primary PC is the minimum.<br>2. Are there any Text to Speech requirements<br>3. What are the total number of VESDAnet to be monitored<br>4. What are the total number of VESDA detectors on the VESDAnet to be monitored<br>5. What are the total number of "Direct Connect" VESDA detectors. |
| **Ordering Information** | Xtralis VSM4 is available for download from www.xtralis.com. |

| Ordering Code | Description |
|---|---|
| VSW-206 | First PC License |
| VSW-216 | Additional PC License PC |
| 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 | VESDA ECO / VESDA Sensepoint XCL Detector network connection - One required per monitored detector |

| Software Image | Description |
|---|---|
| **Supported Products** | **MODBUS**<br>• VESDA Sensepoint XCL<br>• VESDA ECO<br>• VLW-008 2.19.00 - 3.00.405<br>**VESDAlink**<br>• VESDA VLC LP Phase 1<br>• VESDA VLC Ro Phase 1<br>• VESDA VLC Simplex Phase 2<br>• VESDA VLC 800-MX Phase 2<br>• VESDA VLC ESSER Phase 2<br>• VESDA VLC AP Phase 2<br>**VESDAnet**<br>• VESDA VLP<br>• VESDA VLS<br>• VESDA VLC<br>• VESDA VLF<br>• VESDA VLC<br>• VESDA VLS<br>• VESDA VLI<br>• VESDA-E VEA<br>• VESDA-E VEU<br>• VESDA-E VEP<br>• VESDA-E VES<br>• Remote Relay<br>• VESDA Display<br>• System Relay Module<br>• VLS Remote Relay<br>• VLS Display<br>• VESDA Programmer<br>• VESDA Sliding Windows HLI<br>• VESDA Stop-and-go HLI<br>• VESDA Open protocol HLI<br>• VESDA Sliding Windows HLI with Dial Out<br>• Analog Output Module<br>• VESDA ModBus HLI<br>• VESDA Access HLI<br>• VESDA MODBUS3 HLI<br>**VESDAtalk**<br>• VESDA VLF<br>• VESDAnet Card<br>• Multifunction 020 Control Card<br>• Multifunction 030 Control Card |

# Locations

Please refer to the Xtralis website for office locations.

# Technical Support

Please refer to the Xtralis website for technical support contacts.

# 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.**