Xtralis VESDA VFT-15 detectors are multi-channel microbore air-sampling systems with an alarm sensitivity range from 0.0003% to 6.10% obscuration/ft (0.001% to 20% obscuration/m). These detectors are classified as Very Early Warning Smoke Detectors and can reliably detect fire at an early stage, and low to high concentrations of smoke. As a multi-channel system, the VFT detector is able to divide a protected space into sampling sectors, enabling the localization of a fire for faster incident response.

The detectors are configurable for a variety of environments, providing ideal fire detection solutions for cabinets, Electronic Data Processing (EDP) rooms, prisons, historic houses, custody suites, museums and art galleries.

**How it works**

The VFT detector draws a combined air sample from a network of microbore flexible tubing from all sectors in the protected area, then filters and analyzes the sample in a laser detection chamber. When smoke particles are detected and the smoke level reaches a TRACE alarm threshold, the system will sequentially scan the sectors via the rotary valve to identify the sector, or sectors, with the smoke condition. Alarm states (Alert, Action, Fire 1 and Fire 2) are shown on the display and communicated to a host fire alarm control panel.

**Product Features**

**Programming and Configuration**

Four independent alarm levels are available for each channel. The smoke thresholds and delays for each of these alarms can be individually programmed per sector. VFT detectors provide a simple and comprehensive display that includes an LED array to show the measured smoke level for the currently selected microbore, and an on-board programmer for local configuration.

RS232, RS485 and TCP/IP communication interfaces are available to connect to Xtralis Configuration and Fire System Management software packages: Xtralis VSC and Xtralis VSM4. RS485 interfaces also allow connections to programming devices and remote displays, and the TCP/IP Ethernet interface can provide access to an email messaging service.

**Inputs and Outputs**

VFT detectors support a number of additional modules. These provide the detector with programmable output relay interfaces and 4 to 20 mA analog outputs. A Remote Display panel can also be connected at a distance of up to 1 km away from the main VFT detector.

**Features**

- 15 pipe air sampling
- 0.0003% to 6.10% obscuration/ft (0.001% to 20% obscuration/m)
- 4 Alarms - Alert, Action, Fire 1, Fire 2
- 15 x 164 ft (15 x 50 m) microbore sampling pipe
- Enhanced 0.7 bar rotary vane vacuum pump
- Ethernet TCP/IP
- RS232 and RS485 Modbus
- 5 relay outputs and expandable
- Optional relay module and 4 to 20 mA analog outputs module
- Area coverage of up to 16 150 ft² (1500 m²)

**Listings/Approvals**

- UL
- FM
- VdS
- CE - EMC, LVD and CPD
- EN54-20

Regional approvals listings and regulatory compliance vary between Xtralis VESDA models.
Aspiration and Flow Sensing

The aspirator is a 0.7 bar rotary vane vacuum pump, which provides superior detection times over long pipe lengths and reliable detection in high air flow environments. Airflow in each pipe is monitored by a differential pressure sensor, with airflow faults indicated on the display and to monitoring equipment.

Specifications

Supply Voltage:
Nominal 24 VDC

Supply Current at 24 VDC:

<table>
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<tr>
<th>Quiescent Scanning</th>
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<tr>
<td>Power</td>
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<tr>
<td>Current</td>
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Aspirator:
0.7 bar rotary vane vacuum pump

Dimensions (WHD):
19.3 in. x 14.0 in. x 7.9 in.
(490 mm x 355 mm x 200 mm)

Operating Conditions:
Tested to:
14 to 131 °F (-10 to 55 °C)
Recommended Detector Ambient:
32 to 103 °F (0 to 39 °C)
Sampled Air:
4 to 140 °F (-20 to 60 °C)
Humidity:
10 to 95% RH (non-condensing)

Please consult your Xtralis office for operation outside these parameters or where sampled air is continually above 0.015% obs/ft (0.05% obs/m) under normal operating conditions.

Microbore Size:
Outer Diameter: 6 mm
Inner Diameter: 4 mm

Microbore Length:
15 x 164 ft (15 x 50m)
Pipe Length: 164 ft (max)

Alarm Sensitivity Range:
0.0003 to 6.10 % obs/ft (0.001 to 20 % obs/m)

Alarm Settings:
Alarm levels: Alert, Action, Fire 1 and Fire 2
Individually programmable for each level

IP Rating:
IP30

Filtration:
Cartridge dust particle filter

Flow Monitoring:
Differential pressure sensor

Relay Outputs:
4 alarm relays, 1 fault relay
Rated 2 A @ 30 VDC NO/NC Contacts

Communication:
Modbus over RS232, RS485 and TCP/IP

Ordering Information

24 VDC, Display/Programmer, TCP/IP, 15 inlets, Class A/B/C, 0.0003 to 6.1% obs/ft (0.001 to 20% obs/m) VFT-15

24 VDC, Display/Programmer, TCP/IP, 15 inlets, Class C, 0.3 to 6.1% obs/ft (1 to 20% obs/m) VFT-15-C

4-Channel Relay Module 01-E606-01

*8-Channel 4-20 mA Re-Transmission Module 01-E624-01

Remote Display 01-V921-15

*Note: The 8-Channel Re-Transmission module is currently not approved. Please contact your nearest Xtralis office for more information.