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, prison cells, historic houses, 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 inderpendant 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.

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**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 built-in
- Optional relay module and 4 to 20 mA analog output modules
- Area coverage of up to 16 150 ft² (1500 m²)
- Event Log

**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.

Dimensions

<table>
<thead>
<tr>
<th>Dimensions (WHD)</th>
<th>19.3 in. x 14.0 in. x 7.9 in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(490 mm x 355 mm x 200 mm)</td>
<td></td>
</tr>
</tbody>
</table>

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: 0.24 in. (6 mm)
- Inner Diameter: 0.16 in. (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

Event Log:

- Up to 20,000 events stored

**Note:**

1. Please contact your nearest Xtralis office for approvals status.

Ordering Information

- 24 VDC, Display/Programmer, TCP/IP, 15 inlets, 0.0003 to 6.1% obs/ft (0.001 to 20% obs/m) VFT-15-0
- 4-Channel Relay Module¹ 01-E606-01
- 8-Channel 4-20 mA Re-Transmission Module¹ 01-E624-01
- VFT-15 Remote Display¹ 01-V921-15

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¹ Please contact your nearest Xtralis office for approvals status.

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**Specifications**

- **Supply Voltage:** Nominal 24 VDC
- **Supply Current at 24 VDC:**
<table>
<thead>
<tr>
<th>Quiescent</th>
<th>Scanning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>31.2 W</td>
</tr>
<tr>
<td>Current</td>
<td>1.30 A</td>
</tr>
</tbody>
</table>
- **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)