Xtralis VESDA VFT

VFT-15

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 independant 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 built-in
- Optional relay module and 4 to 20 mA analog output modules
- Area coverage of up to 16 150 ft^2 (1500 m^2)
- 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.


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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
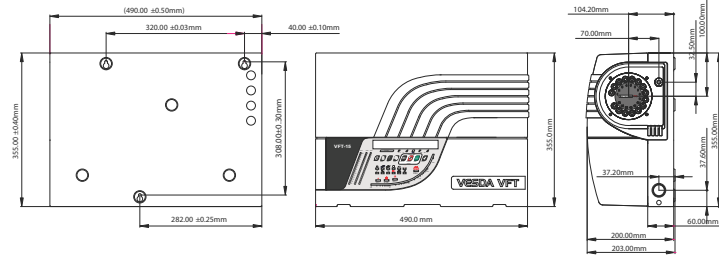
Ordering Information

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 Module[1]	01-E606-01
8-Channel 4-20 mA Re-Transmission Module[1]	01-E624-01
VFT-15 Remote Display[1]	01-V921-15

Note:

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

Specifications

Supply Voltage:
Nominal 24 VDC

Supply Current at 24 VDC:

	Quiescent	Scanning
Power	31.2 W	55.9 W
Current	1.30 A	2.33 A

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: 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

* Product UL listed for use from
 0 °C to 38 °C (32 °F to 100 °F)

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www.xtralis.com

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