Advanced

Axis AX

VESDA VLC by Xtralis

The VESDA VLC-400 is a derivative of the standard VESDA VLC product family specifically designed to support Apollo communication protocol. It operates as a smoke sensor on the Axis AX Series SLC loop and reports directly to the Axis AX Series Intelligent Fire Alarm Control Panel. Up to 126 VLC-400 detectors may be connected directly to an Axis AX Series Intelligent Fire Alarm Control Panel SLC loop eliminating the need for a separate loop interface thereby providing simpler installation and lower costs.

The VLC-400 provides very early smoke detection for small to medium areas within a single environment and incorporates:

A purpose built aspirator design	Clean air barrier optics protection
A simplified display	Onboard relay and remote LED output
An onboard isolator supporting NFPA 72 Style 7 SLC wiring	Supervised PSU monitor input (47K EOL)

VLC detectors provide Very Early Warning of potential fire conditions by drawing air samples through a single pipe up to 260 ft long, or through two pipes of up to 98ft when branched within 16ft of the detector. Smoke is sampled through holes in the pipe and transported to the detector by an integrated aspirator. Holes are positioned according to the application and often follow the spacing of standard conventional point detectors. Where necessary sampling points can be constructed using capillary tubes and sample point devices.

As an Advanced Axis AX Series SLC detector, the VLC-400 operates in one of 5 sensitivity modes (see specifications section). The threshold associated with each mode is independently configurable using a PC running Xtralis VSC with the default settings.

The detector continuously passes air samples from the protected area through to the Laser Detection Chamber. Ultra-fine air filtration provides very clean air to protect the optical surfaces inside the detector from contamination. If any smoke is detected in the chamber, its concentration is signaled to the Main Processor Card. When the concentration of smoke is higher than the set alarm thresholds, then it is reported either as a Pre-Alarm or an Alarm depending upon the set alarm thresholds.



Features

- Compatible with Advanced Axis AX Series SLC Loops
- Protects Areas up to 8000 sq. ft.
- Absolute Smoke Detection
- Wide Sensitivity Range
- AutoLearn Smoke
- Single Pipe Inlet
- VESDAlink Communications
- Clean Air Barrier Optics Protection
- Airflow Monitoring
- Simple Mounting Design

Listings and Approvals

- ETL ANSI/UL 864 Listed: 101564744NYM-001
- UL
- LPCB
- CE - EMC and CPD
- EN 54-20
- ULC Listing Pending

*Regional approvals listings and regulatory compliance vary between VESDA product models. Refer to www.xtralis.com for the latest product approvals matrix.

Specification

Supply Voltage	18 to 30 VDC (Nominal 24 VDC)

Power Consumption	Maximum 5.4 watts (Including Alarm)
Maximum No. of Detectors per SLC Loop:	126 (Addresses 1-126)
Configurable Onboard Relay	Follows Fire LED [or Control by FACP] (NO or NC, 2A @ 30 VDC)
Isolation	Fuse rating: 1.6A, Integrated Apollo Loop Isolation Meeting NFPA Style 7
Enclosure Dimensions (WHD):	4.2 lbs (1.9 kg)
Operating Temperature	32ºF to 103ºF (0ºC to 39ºC) *Tested: 14ºF to 131ºF (-10ºC to 55ºC) *Sample Air: -4ºF to 140ºF (-20ºC to 60ºC) *Humidity 10% to 95% RH, Non-Condensing
Sampling Network	Maximum Single Pipe Length: 260 ft (80 m Approx.), Maximum Two Pipe Lengths: 164 ft (50 m Approx.) Each, Maximum Area of Coverage: 8000 sq. ft (800 m2 Approx.)
Pipe ID	Internal Diameter: 9/16” - 7/8” (15-21mm) External Diameter: 1.05” (25mm)
IP Rating	IP30
Cable Termination	Screw Terminal Blocks 30-12 AWG (0.2 - 2.5 mm2)
Sensitivity Range	0.0015 to 6% Obs/ft (0.005 to 20% Obs/m)
Default Settings for Sensitivity Modes	Mode 1 - 0.015% Obs/ft - 15 Sec Delay Mode 2 - 0.03% Obs/ft - 10 Sec Delay Mode 3 - 0.06% Obs/ft - 10 Sec Delay Mode 4 - 0.15% Obs/ft - 10 Sec Delay Mode 5 - 0.31% Obs/ft - 15 Sec Delay
Software Features	Event Log: Capacity 10,240 Events Reporting Smoke Level, Alarms, Faults with Time and Date Stamp AutoLearn Function which Adapts the Detector to the Surrounding Environment (Minimum 15 Minutes, Maximum 15 days)

Order Codes and Options

VLC-400	VESDA VLC 400

Advanced, The Bridges, Balliol Business Park, Newcastle upon Tyne, NE12 8EW, UK T: +44 (0)345 894 7000 E: enquiries@advancedco.com
W: www.advancedco.com

As our policy is one of constant product improvement the right is therefore reserved to modify product specifications without prior notice.