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Description

VLC detectors provide Very Early Warning of potential fire conditions by drawing air samples through a single pipe up to 260ft 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.

In keeping with the Apollo protocol it reports the analogue value with a count of 55 corresponding to the Fire Condition. As a discovery detector, the VLC-400 operates in one of 5 sensitivity modes (see specifications overleaf).

The threshold associated with each mode is independently configurable using a PC running Xtralis VSC with the default settings.

Features

The VESDA VLC-400 is a derivative of the standard VESDA VLC product family specifically designed to communicate directly on the Apollo loop.

It operates as a smoke sensor on the Apollo SLC loop and reports directly to the Fire Alarm Control Panel (FACP). It is compatible with FACP's using the Apollo XP95 and Discovery SLC protocols.

Up to 126 VLC-400 detectors may be connected directly to an Apollo Discovery or XP95 compatible panel 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:

- Compatible with Tracker Fire Alarm Panels
- Utilize Apollo Discovery & XP95 protocols
- Protect areas up to 8000 sq ft



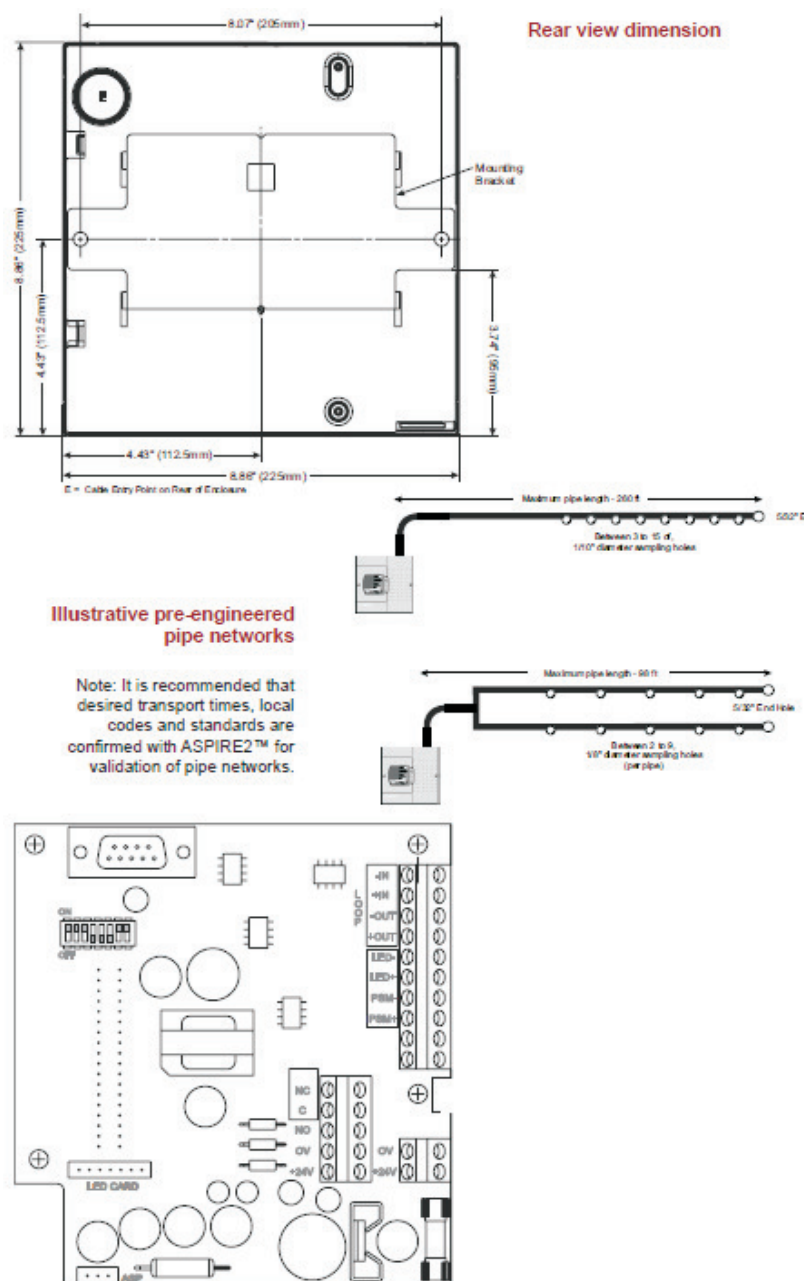
- Absolute smoke detection
- Wide sensitivity range
- Single pipe inlet
- VESDALink communications
- Clean air barrier optics protection
- Airflow monitoring
- AutoLearn Smoke
- Simple mounting design

Ordering Information

Model Number	Part Number	Description
VLC-400	VLC-400	Very Early Warning of potential fire conditions
VPS-100-120	VPS-100-120	Power Supply, Single Zone with Housing, 120 VAC
VRT-100	VRT-100	Programmer
VRT-200	VRT-200	Display VLP and VLF, no Relays
VRT-600	VRT-600	Display VLP and VLF, no Relays
VRT-V00	VRT-V00	Display VLP, 7 Relays
VRT-300	VRT-300	VESDAnet Socket
VHX-0200	VHX-0200	PC-Link HLI Sliding Windows, RS232 Interface
VHH-100	VHH-100	Hand Held Programmer
VSP-005	VSP-005	Filter Cartridge
VP-P-210	VP-P-210	Box 14 Pieces (210 feet total)
VP-ELB-90	VP-ELB-90	Elbow - 90 Degree Box of 20
VP-ELB-45	VP-ELB-45	Elbow - 45 Degree, Box of 10
VP-COUP	VP-COUP	Coupling, Box of 15
VP-UNION	VP-UNION	Socket Union, Box of 10
VP-EC	VP-EC	End Cap, Box of 25
P-TEE	P-TEE	Pip Tees, Box of 15
VP-CUTTERS	VP-CUTTERS	CPVC Pipe Cutters Cuts up to 1 1/2" pipe
VP-CEMENT	VP-CEMENT	Solvent Cement One (1) Pint
VP-TEE-FPT	VP-TEE-FPT	Tee, Box of 10

Ordering Information Continued

Model Number	Part Number	Description
E700-TUBE	E700-TUBE	Polyethylene Tubing, 50 Feet
E700-SP	E700-SP	Miniature Sampling Point
PIP-015	PIP-015	Flush Sampling Point
E700-CAP KIT	E700-CAP KIT	Plastic Connector Kit for miniature sampling point
E700-SPLR	E700-SPLR	Miniature Sampling Point Label, Round Style, 12 per
E700-SP-DCL	E700-SP-DCL	Sampling Point Decal, wrap around style, 200 per roll



Specifications

Supply Voltage:
18 to 30 VDC (nominally 24VDC)

Power Consumption:
Max 5.4 watts (incl. Alarm)

Current Consumption:
245mA max at 24 VDC (in Alarm state)

Max No. of detectors per Apollo loop:
126 units (addresses 1-126)

Configurable Onboard Relay:
Follows Fire LED or under control of panel (NO or NC, 2A@ 30VDC)

Configurable Remote LED Output:
Follows Fire LED or under control of panel

Isolation:
Fuse rating: 1.6A
Integrated Apollo Loop isolation meeting NFPA 72 Style 7 requirements

Enclosure Dimensions (WHD):
8in x 8in x 3in (225mm x 225mm x 85mm)

Enclosure Weight:
4.2lbs (1.9kg)

Operating Temperature:
Ambient: 32F to 103F (0C to 39C)
Tested: 14F to 131 F (-10 to 55)

Sampled Air: -4F to 140F (-20 C to 60C)

Humidity: 10% to 95% RH non-condensing

Sampling Network:
Maximum single pip length: 260 ft (80 m approx)
Maximum two pip length: 164ft (50m approx) each
Maximum area of coverage: 8000 sqft (800m² approx)

Pipe ID:
Internal Diameter: 9/16" 7/8"
External Diameter: 1.05" (25mm)

IP Rating:
IP30

Cable Termination:
Screw terminal blocks 30-12 AWG (0.2 2.5mm²)

Sensitivity Range:
0.0015 to 6% Obs/ft (0.005 to 20% Obs/m)

Default Setting 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 1- sec delay
Mode 5 0.31% Obs/ft 10 sec delay

Software Features

- Event Log: Capacity 10,240 events reporting smoke level, alarm and faults with time and date stamp
- AutoLearn function which adapts the detector to the surrounding environment (mim 15 minutes max 15 days)

NOTICE: The information contained in this document is intended only as a summary and is subject to change without notice. The devices described in this document have specific instruction sheets which cover various technical, limitation and liability information. Copies of these instruction sheets and the General Product Warning and Limitations Document, which also contains important information are provided with the product and are available from Harrington Signal Inc. Fire Alarm. Information contained in these documents should be consulted before specifying or using the product. For further information or assistance concerning particular problems contact Harrington Signal Inc. Fire Alarm reserves the right to change accessory only specifications without notice. Modern is an (non UL listed)