

PRODUCT DATA SHEET

VLF-250 VESDA Laser Focus

FEATURES

- Out-of-the-Box Installation and Commissioning
- **Ultrasonic Airflow Sensing**
- Laser-Based Absolute Smoke Detection
- Programmable alarm thresholds
- **Dual Stage air filtration**
- Instant Recognition Display
- Instant Fault Finder™
- AutoLearn™ Smoke
- AutoLearn™ Flow
- Field Service Access Door
- Multiple event logging in separate logs
- Event log up to 18000 events
- Offline/online configuration capability
- Up to 250m² coverage



PRODUCT DESCRIPTION

The VESDA Laser FOCUS detector is a very early warning smoke detector designed to protect small, business-critical environments of less than 250m². The detector works by continually drawing air into sample holes in a pipe network. The air is filtered and passed into a detection chamber where light scattering technology detects the presence of very small amounts of smoke. Detector status information is communicated on the detector display and via relays or optional interface cards.

Out-of-the-box Operation:

The VESDA LaserFOCUS can be installed and commissioned out-of-the-box without the need for a special interface or software programming tools. In operation, the unique Smoke Dial display provides the user with an instant understanding of a smoke event, even from a distance. Should a fault occur, the user simply opens the field service door and activates the Instant Fault Finder feature to determine the specific fault condition. This information can then be passed onto their fire service company, ensuring that service technicians arrive onsite fully prepared.

Ultrasonic Flow Sensing:

The patent-pending Ultrasonic Flow Sensing used in the LaserFOCUS provides a direct reading of the sampling pipe flow rate. The system is immune to air temperature and pressure changes and is unaffected by contamination. VESDA is the first air sampling smoke detector to use ultrasonic flow sensing.

The display provided to the user includes a Smoke Dial and alarm and status indicators. When the field service access door is open, the user has access to the RESET, DISABLE, Fire Test, AutoLearn and Instant Fault Finder functions. When the Instant Fault Finder function is activated, the Smoke Dial converts to a fault indicator, with the dial segment numbers corresponding to the faults listed below.

1: Filter	2: Aspirator	3: High flow	4: Low flow	5: n/a
6: External Device/PSU	7: Interface card	8: Field wiring	9: AutoLearn Fail	10: Detector failure





02 8850 2888 sales@firesense.com.au

Unit 4, 297 Ingles St PORT MELBOURNE 3207 03 9646 4557 salesvic@firesense.com.au Unit 2, 225 Queensport Rd North MURARRIE 4172 07 3890 8842 salesold@firesense.com.au





PRODUCT DATA SHEET

VLF-250 VESDA Laser Focus

TECHNICAL SPECIFICATIONS

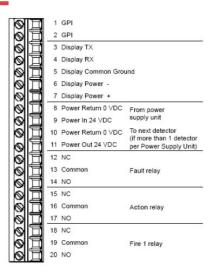
Input Power	Voltage: 24Vdc Nominal (18-30Vdc) Current @ 24Vdc: 220 mA nominal, 295mA in alarm		
Dimensions	255mm W x 185mm H x 90mm D		
Weight	Approx. 2 kg		
IP Rating	IP30		
Mounting	Upright, inverted or horizontal		
Operating Conditions	Detector ambient: 0°C to 40°C Sampled air: 0°C to 40°C Humidity: 5% to 95% (non-condensing)		
Sampling Network	Maximum pipe lengths: 1 x 25m (max. 12 holes), 2 x 15m per branch (max. 6 holes per branch). Pre-engineered option or maximum pipe length in accordance with pipe modelling Sampling hole options: Design Tool (ASPIRE2™)		
Air Inlet Pipe	Accepts both metric and American standard pipe sizes. Metric: 25mm American Pipe: IPS 21mm		
Area Coverage	Up to 250m² depending on local codes and standards		
Relay Outputs	3 changeover relays (Fire 1, Action, Fault), Contacts rated 2A @ 30Vdc (max). NO/NC Contacts		
Cable Access	Access 3 x 25mm cable entries (1 rear entry, 2 top entry)		
Cable Termination	Screw Terminals 0.2-2.5mm ² (30-12 AWG)		
Interfaces	Shown in Terminal Block Connections diagram, to right, plus an RS232 Programming Port. General Purpose Input (GPI) interface offers: Reset, Disable, Standby, Alarm set 1, Alarm set 2 and External Input functions.		
Alarm Threshold Setting Range	Alert, Action: 0.025 - 2.00% obs/m Fire 1, Fire 2: 0.025 - 20.00% obs/m Individual Alarm Delays: 0 - 60 seconds Two Alarm Threshold Settings: Either time or GPI based		
Display	 4 Alarm State Indicators Fault and Disabled Indicators Smoke Level Indicator Instant Fault Finder Reset, Disable and Test Controls Smoke and Flow AutoLearn Controls 		
Event Log	Up to 18000 events, time and date stamped in separate, non-volatile, logs for: Smoke Level, Flow Level, Detector Status and Faults		
AutoLearn Smoke & Flow	Automatically set acceptable alarm thresholds for both smoke and flow levels. Minimum 15 minutes, maximum 15 days (default 14 days). During AutoLearn™ thresholds are NOT changed from pre-set values.		



PRODUCT DATA SHEET

VLF-250 VESDA Laser Focus

TERMINAL BLOCK CONNECTIONS



APPROVALS

- ✓ UL 268, 268A
- ✓ FM Approved for Hazardous Locations, Class I, Div. 2
- √ CCCf Approved
- ✓ LPCB Approved
- √ VdS Approved
- ✓ ActivFire certified Listing No. afp-1770