SIEMENS

VLF-250, VLF-500

LaserFOCUS

addressable (FDnet/C-NET)

Sinteso™
Cerberus® PRO

$C\epsilon$

- **Compatible with the Siemens FDnet/C-NET loop**
- **Out-of-the-box installation and commissioning**
- **Ultrasonic airflow sensing**
- **Laser-based absolute smoke detection**
- **ASPIRE2 support and pre-engineered pipe network designs**
- **Programmable alarm thresholds**
- **Clean air barrier optics protection**
- **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 250 m^2 (2500 sq. ft.) coverage**
- **Up to 500 m^2 (5000 sq. ft.) coverage**

Building Technologies

Fire Safety & Security Products

The VLF-250/500 detector is a very early warning smoke detector designed to protect small, business-critical environments of up to 250 m^2 (2500 sq. ft., VLF-250) or 500 m^2 (5.000 sq. ft., VLF-500).

The detector works by continually drawing air into sampling 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.

Lower cost installation and support

The LaserFOCUS detector communicates directly on the FDnet/C-NET loop, so there is no need for separate relay or network connections. This reduces the cost of installation and support. The detector acquires its loop address automatically.

Complete fire control panel

The sophisticated integration on FDnet/C-NET allows all detector configurations, maintenance and alarm/fault management to be performed centrally – at the fire control panel. This increases control and lowers total solution cost.
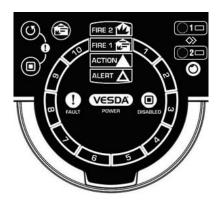
Out-of-the-box operation

The LaserFOCUS can be installed and commissioned out-of-the-box. AutoLearn smoke and flow functions set alarm/fault thresholds for both smoke and flow levels automatically.

Ultrasonic flow sensing

The patent-pending ultrasonic flow sensing used in the VLF-250/500 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. The VLF is the first air sampling smoke detector to use ultrasonic flow sensing.

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Display

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.

Legend of fault indicators

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

Technical data

	VLF-250-SIE	VLF-500-SIE
Input power		
Voltage	24 VDC nominal (18… 30 VDC)	
Current @ 24 VDC	262 mA nominal, 337 mA in alarm	452 mA nominal, 532 mA in alarm
Dimensions (W x H x D)	255 mm x 185 mm x 90 mm (97/8 in x 71/8 in x 31/2 in)	
Weight	approx. 2 kg (4.4 lbs)	
Protection category	IP30	
Mounting	upright, inverted or horizontal	
Operating conditions		
Detector ambient	0… 40 °C (32… 104 °F)	
Sampled air	0… 40 °C (32… 104 °F)	
Humidity	5… 95% (no condensation)	
Sampling network		
Maximum pipe lengths	1 x 25 m (80 ft) (Max. 12 holes) 2 x 15 m (50 ft) per branch (Max. 6 holes per branch)	1 x 50 m (150 ft) (Max. 24 holes) 2 x 30 m (90 ft) per branch (Max. 12 holes per branch)
Sampling hole options	pre-engineered option or maximum pipe length in accordance to pipe modeling design tool ASPIRE2	
Air inlet pipe	Metric: 25 mm American pipe: IPS ¾ in.	
Area coverage	up to 250 m^2 (2500 sq. ft.) depending on local codes and standards	up to 500 m^2 (5000 sq. ft.) depending on local codes and standards
System compatibility	compatible with all Siemens FC20/FC720 (FS20/FS720 system) and SIGMASYS in FDnet/C-NET loop	
Relay outputs	3 changeovers relays (Fire 1, Action, Fault), contacts rated 2A @ 30 VDC (max). NO/NC Contacts	
Cable access	3 x 25 mm (11/16 in.) cable entries (1 rear entry, 2 top entry)	
Cable termination	screw terminals 0.2… 2.5 mm^2 (30–12 AWG)	
Interfaces	power in/out, Fire 1 relay, Action relay, Fault relay, General purpose input (clean contact), External display port (with power limited output), RS232 programming port	
Alarm threshold setting range		
Alert, Action	0,025… 2,0 % obs/m (0,008… 0.625% obs/ft.)	
Fire 1, Fire 2	0,025… 20 % obs/m (0,008… 6,4% obs/ft.)	
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/fault 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
Warranty period	2 years
Ordering information	VLF-250-SIE LaserFOCUS European language set. International display labels. All detectors include installed FDnet/C-NET interface card. VSP-005 Filter Cartridge VSP-722 Aspirator VLF-500-SIE LaserFOCUS. European language set. International display labels. All detectors include installed FDnet/C-NET interface card. VSP-005 Filter Cartridge VSP-715 Aspirator **EMEA:** Xtralis (UK) Ltd. Focus 31, Mark Road Hemel Hempstead, Hertfordshire HP2 7BW United Kingdom Tel: + 44 1442 242330 Fax: +44 1442 249327 **APAC:** Xtralis Pty Ltd. 4 North Drive, Virginia Park | 236-262 East Boundary Road (PO Box 102) | Bentleigh East, Victoria | Australia, 3165 Tel: +61 3 9936 7200 Fax: +61 3 9936 7201

Listings/Approvals	VdS approved	
	CE - EN54-20	
	- Class A (12 holes / 0.12% obs/m)	- Class A (30 holes / 0.05% obs/m)
	- Class B (12 holes / 0.35% obs/m)	- Class B (30 holes / 0.15% obs/m)
	- Class C (12 holes / 0.80% obs/m)	- Class C (30 holes / 0.32% obs/m)