

# VESDA Model Comparison Chart



FEATURES	VEU	VEP		VES	VEA	VLF 250/500	Industrial VESDA VLI
		VEP 1-pipe	VEP 4-pipe				
<b>Pipes and Area Coverage</b>							
Pipe Length (Linear)	400 m (1,312 ft)	100 m (328 ft)	280 m (919 ft)	280 m (919 ft)	40 x 100 m (40 x 328 ft)	25 / 50 m (82 / 164 ft)	360 m (1,181 ft)
Pipe Length (Branched)	800 m (2,624 ft)	130 m (427 ft)	560 m (1,837 ft)	560 m (1,837 ft)	N/A	30 / 60 m (98 / 197 ft)	445 m (1,460 ft)
Area Coverage	6,500 m <sup>2</sup> * (69,965 sq.ft)	1,000 m <sup>2</sup> (10,760 sq. ft)	2,000 m <sup>2</sup> (21,520 sq. ft)	2,000 m <sup>2</sup> (21,520 sq. ft)	2,000 m <sup>2</sup> (21,520 sq. ft) across 40 sample holes	250 / 500 m <sup>2</sup> (2,690 / 5,380 sq. ft)	2,000 m <sup>2</sup> (21,520 sq. ft)
No. of Pipe Inlets	4	1	4	4	40	1	4
Multiple Pipe Addressability	No	No		Up to 4	Up to 40	No	No
<b>Sensitivity</b>							
Min Fire 1 Threshold	0.001% obs/m (0.0003% obs/ft)	0.01% obs/m (0.0031% obs/ft)		0.01% obs/m (0.0031% obs/ft)	1.6% obs/m (0.5% obs/ft)	0.025% obs/m (0.008% obs/ft)	0.15%/m (0.046%/ft)
Detection Range	0.001 - 20.0% obs/m (0.0003 - 6.25% obs/ft)	0.005 - 20% obs/m (0.0016% - 6.25% obs/ft)		0.005 - 20% obs/m (0.0016% - 6.25% obs/ft)	0.020 - 16% obs/m (0.006 - 4.88% obs/ft)	0.025 - 20% obs/m (0.008 - 6.25% obs/ft)	0.005 - 20.0% obs/m (0.0016 - 6.25% obs/ft)
<b>EN54-20 (Class A/B/C)</b>							
Max. no of Holes (Class A / B / C)	80 / 80 / 100	30 / 40 / 45	40 / 80 / 100	40 / 80 / 100***	40 - 40**	VLF 250 12 / 12 / 12; VLF 500 30 / 30 / 30	24 / 28 / 60
Sampling Point Sensitivity (%obs/m)	1.5 / 3 / 8	1.5 / 3 / 8		1.5 / 3 / 8***	1.6 / 4 / 8	1.5 / 4.5 / 10	1.5 / 4.5 / 10
Transport Time (seconds)	70 / 90 / 110	60 / 90 / 110		60 / 90 / 90***	40 - 90 (Tube length dependent)	VLF 250 60 / 60 / 60 VLF 500 90 / 90 / 90	60 / 90 / 120
<b>Others</b>							
Hazardous Area Approval (FM Class 1, Div 2, Groups A, B, C, D)	No	Yes		No	N/A	Yes	Yes
IP Rating	IP40	IP40		IP40	IP40	IP30	IP66
Two Stage Filtration	Yes	Yes		Yes	Yes	Yes	Patented Intelligent Filter Secondary Foam Filter Sub-sampling Probe

\* System design and regulatory requirements may restrict the monitoring area to a lesser amount

\*\* Check local codes for the required transport times determined by the tube lengths

\*\*\* Subject to agency Testing

FEATURES	VEU	VEP		VES	VEA	VLF 250/500	Industrial VESDA VLI
		VEP 1-pipe	VEP 4-pipe				
Total Number of Alarm Thresholds	8 (Day/Night)	8 (Day/Night)		32 (Day/Night)	8 (Day/Night)	8 (Day/Night)	8 (Day/Night)
Relay Outputs	7	7		12	7 (Expandable to 47)	3 (Expandable to 6)	5
On-board Memory (Max. Events)	20,000	20,000		20,000	20,000	18,000	18,000
AutoLearn™ (Smoke/Flow)	AutoLearn Smoke™ AutoLearn Flow™	AutoLearn Smoke™ AutoLearn Flow™		AutoLearn Smoke™ AutoLearn Flow™	No	AutoLearn Smoke™ AutoLearn Flow™	AutoLearn Smoke™ AutoLearn Flow™
Bar Graph/Indicator LED	LEDs or 3.5" Color Touch Screen	LEDs	LEDs or 3.5" Color Touch Screen	LEDs or 3.5" Color Touch Screen	LEDs or 3.5" Color Touch Screen	Local (7 on-board LEDs 10 Segment Circular Display) Remote display when fitted with VESDAnet card	Local (5 on-board LEDs) Remote display for VLI-885
Programming Tools - On-board Programming module - Handheld Programmer - PC Software (VSC, VSM)	Programmed via USB/Ethernet/WiFi connection to PC using VSC/VSM4	Programmed via USB/Ethernet connection to PC using VSC/VSM4		Programmed via USB/Ethernet connection to PC using VSC/VSM4	Programmed via USB/Ethernet/WiFi connection to PC using VSC/VSM4	Programmed via RS232 direct connection to PC using VSC™ or Programmer when VN card is fitted	Local USB configuration port Connection to PC using VSC/VSM4 Programmer for VLI-885
StaX Expandability	Yes	Yes		Yes	Yes	No	No
Worldwide Certificates	UL, ULC, FDA, VdS (EN54-20), CE, CSFM, FM, AFNOR, VNIPO, ActivFire (ISO 7240-20), BOMBA, RCM CCCF	UL, ULC, FDA, VdS (EN54-20), CE, CSFM, FM, AFNOR, VNIPO, ActivFire (ISO 7240-20), BOMBA, RCM, CCCF		UL, ULC, FDA, VdS (EN54-20), CE, CSFM, ActivFire (ISO 7240-20), BOMBA, RCM	UL, ULC, FDA, VdS (EN54-20), CE, CSFM, FM, ActivFire (ISO 7240-20), BOMBA, RCM, CCCF	UL, ULC, FM, LPCB, VdS, CFE, ActivFire, AFNOR, UL268A (in-duct application), VNIPO, CE, NY-MEA, CSFM, FDA, BOMBA, ONORM, RCM, EN 54-20	UL, ULC, FM, ActivFire, CE, LPCB, VdS, AFNOR, CSFM, FDA, BOMBA, VNIPO, RCM, NY-MEA, SIL 2 as per IEC 61508, EN 54-20
<b>VESDAnet™</b>							
Max. No. of devices/detectors per loop	200 / 100	200 / 100		200 / 100	200 / 100	200 / 100 (with VN Card)	200 / 100 (VLI-885)
Max. Distance between Devices	1,300 m (4,265 ft)	1,300 m (4,265 ft)		1,300 m (4,265 ft)	1,300 m (4,265 ft)	1,300 m (4,265 ft) (with VN Card)	1,300 m (4,265 ft) (VLI-885)
Computer-based Management via VSM	Yes	Yes		Yes	Yes	Yes	Yes
Remote Relay Modules - 7 relay version - 12 relay version	VRT-500 N/A	VRT-500 N/A		VRT-E00 VRT-900	VRT-500 N/A	VRT-500 N/A	VRT-500 N/A
Compatible Remote Bargraph Displays - Display, 7 relays - Display, 12 relays - Display, no relays	VRT-200 N/A VRT-600	VRT-200 N/A VRT-600		VRT-400 VRT-800 VRT-700	VRT-200 N/A VRT-600	VRT-V00 N/A VRT-W00 (with VN Card)	VRT-Q00 N/A VRT-T00 (VLI-885)