

**Features:**



- Laser-based absolute smoke detection
- Clean air barrier for optics protection
- Up to 100m<sup>2</sup> (1000ft<sup>2</sup>) coverage
- Up to 2 x 6m (20ft) linear or up to 2 x 9m (30ft) branched pipe lengths
- 2 or 4 Class A / VEWFD sampling holes
- Metric/Imperial pipe inlets
- Pre-alarm, Alarm and Fault Relays
- 5 LEDs, Pre-alarm, Fire, Fault, Filter, Power
- Monitored on-board filter
- AutoLearn™ Smoke
- General Purpose Input (GPI)
- USB port for PC connection
- Event log
- Lower power consumption
- Configuration via DIP switches
- Various mounting options

**Description:**

The VESDA VLQ detector is a cost-effective Aspirated Smoke Detection (ASD) solution that meets the unique needs of numerous small area applications of up to 100m<sup>2</sup> (1000ft<sup>2</sup>). Examples of these include telco landline remote offices, base station controllers, remote base stations, small server rooms, data centre containers, critical equipment, packaged HVAC units, anechoic chambers, pump houses, generator enclosures, signalling huts and modular laboratories.

VLQ detectors are suitable for both high and normal sensitivity applications and offer many installation advantages in terms of out-of-box operation, stand-alone functionality and simplified pipe network.

**How it works:**

The VLQ detector actively draws air from the protected area through a pipe network where two or four holes are used. The VLQ has two pipe inlets and there are always one or two holes on each pipe. Sampled air is then filtered before being analysed by the detection chamber.

The detection chamber utilizes a laser light source and photoelectric receiver circuitry to detect scattered light caused by the presence of smoke.

Alarm (Pre-Alarm & Fire) and Fault conditions are reported by activating the corresponding LEDs on the simple display and dry contact relays.

The system allows configuration of both smoke alarm and flow fault thresholds to suit the application needs.

**Inputs and Outputs:**

The VLQ detector provides a programmable General Purpose Input (GPI) for remote Reset, Reset + Disable, Stand-by and External Device (PSU) monitoring functions. Three dry contact relay outputs are available for Alarm and Fault annunciation.

**Specifications:**

<b>Supply Voltage:</b>	24 VDC nominal (18 to 30 VDC), externally supplied
<b>Current Consumption:</b>	170 mA (quiescent), 190 mA (max)
<b>Dimensions (WHD):</b>	260mm x 228mm x 110mm
<b>Weight:</b>	1.2kg
<b>Operating Conditions:</b>	<b>Tested to:</b> -10°C to 55°C <b>Recommended Detector Ambient:</b> 0°C to 39°C <b>Humidity:</b> 0% to 95% RH, non-condensing
<b>Input Pipe Size:</b>	Accepts both metric and imperial standard pipe sizes: <b>Metric:</b> 25mm external diameter <b>Imperial:</b> 1.05 in (3/4" pipe) external diameter
<b>Sampling Network:</b>	<b>Pipe Length:</b> Up to 2 x 6m linear, up to 2 x 9m branched <b>Sampling Holes:</b> 2 or 4 (1 or 2 per pipe)
<b>Sensitivity Range:</b>	0.005% - 3.0% obs/m
<b>Threshold Setting Range:</b>	<b>Fire Alarm:</b> 0.15%/m – 3%/m <b>Pre-Alarm:</b> 0.1%/m – 1.5%/m
<b>Alarm and Flow Delays:</b>	0 – 60 seconds
<b>AutoLearn:</b>	Smoke
<b>Indication:</b>	5 LEDs for Pre-Alarm, Fire, Fault, Filter and Power
<b>IP Rating:</b>	IP30
<b>Filteration:</b>	Field replaceable and monitored
<b>Flow Monitoring and Reporting:</b>	High and Low adjustable
<b>Fan Control:</b>	2 x fans at fixed speed, supervised
<b>Relays:</b>	3 Relays rated 2 A @ 30VDC (Pre-alarm, Fire, Fault)
<b>PC Connection:</b>	USB
<b>General Purpose Input (GPI):</b>	Reset, Reset + Disable, Stand-by and External Device (PSU) monitoring
<b>Event Log:</b>	1,000 events
<b>Cable Termination:</b>	Screw terminal blocks (0.2-2.5sq mm, 30-12 AWG)

**Ordering Information:**

- **VLQ-100** - Vesda VLQW/relays and USB

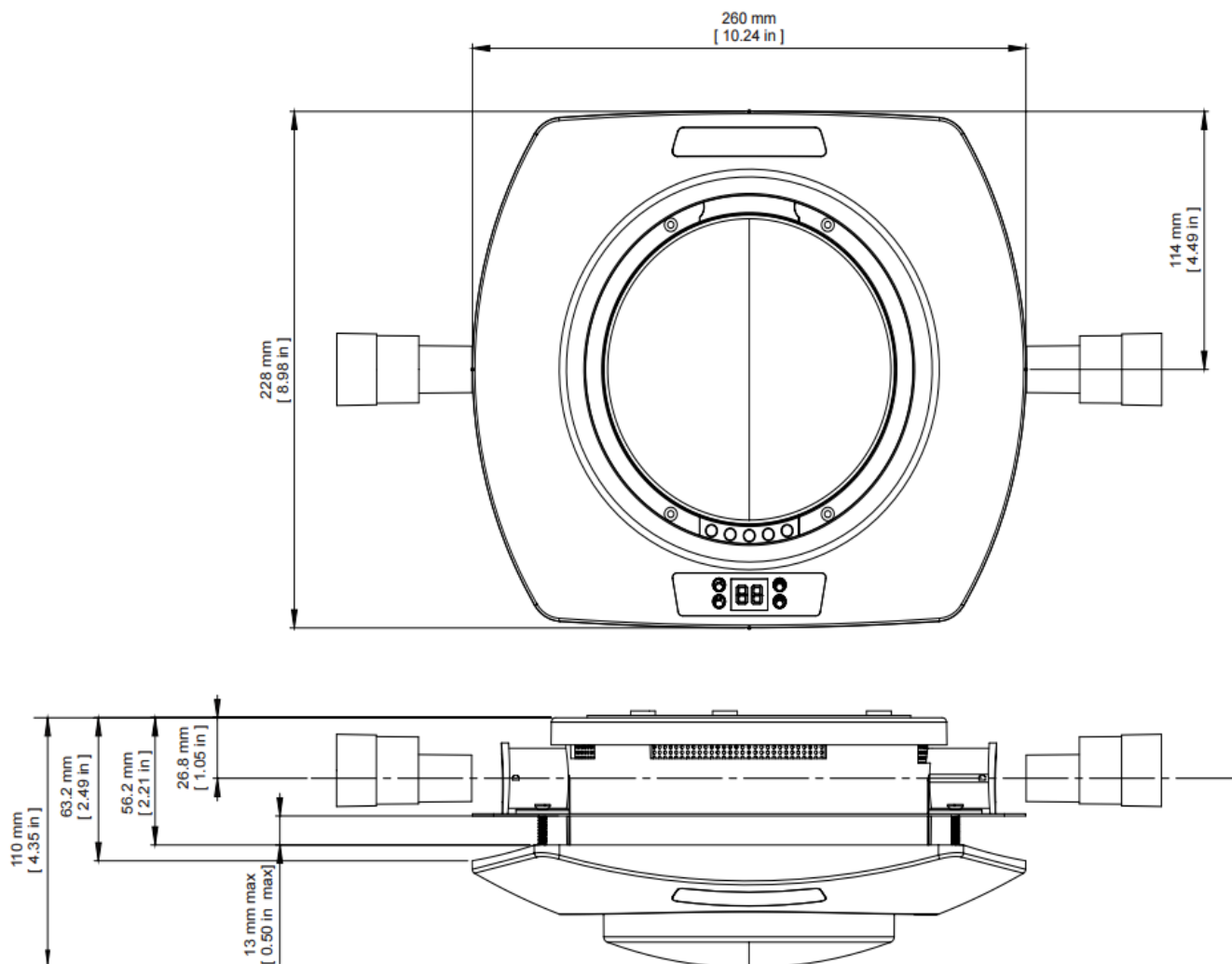
**Options:**

- **VSP-890** - VLQ Surface Mount Kit
- **VSP-891** - VLQ Flush Mount Kit
- **VSP-893** - 2 Pipe Stubs with End-caps

**Spares:**

- **VSP-892** - VLQ Replacement Filter

**Dimensions:**



**Listings/Approvals:**

- UL
- ULC
- ActivFire
- CE
- LPCB
- VNIPO
- EN 54-20 (Class A, B & C with 4 holes)
- Other approvals pending