Features

- EN54-20 approved ✔
- Economical, single or dual area aspirated ‘fire’ detection ✔
- 1 or 2 sampling pipes - each up to 100m in length ✔
- Coverage up to 1,500m^2 at class C ✔
- 3 users configurable alarm levels per channel ✔
- Integral Display and Programmer ✔
- Field serviceable and/or replaceable laser detection element ✔
- Easy to install, commission and maintain ✔
- Low operating current ✔
- Rugged IP65 enclosure ✔
- Single, redundant or coincidence detection strategies ✔

The EF-LASD is a professional, high-sensitivity air sampling smoke detector, designed for the protection of risks requiring class A, B or C design sensitivity. The unit is rugged, compact, weatherproof and highly versatile, enabling it to be used for both general area coverage and localised protection of equipment cabinets or ductwork. Areas which are subject to high levels of dust, low temperature or water ingress can also be accommodated using optional harsh environment filters, water traps and pipework heaters.

EF-LASD is available in 1 or 2 pipe versions, each with 2 sets of alarm and 1 set of fault contacts per channel. Alarm contacts are programmable across the dynamic sensitivity range of 0.06 to 3.33% per meter in 9 stages. The internal fan is both powerful and quiet, allowing pipe lengths of up to 100m (25mm of 3/4” tube) per channel to be installed.

The EF-LASD requires no special tools or software to configure and can be programmed and interrogated externally by a code protected membrane keypad. A PC utility, Configtracer, is also available for configuration and diagnostics, which is accessed via an external USB port.

System Design

Pipe configurations can be installed following simple pre-engineered guidelines or developed and verified using Aspire2 PC software.

Operation

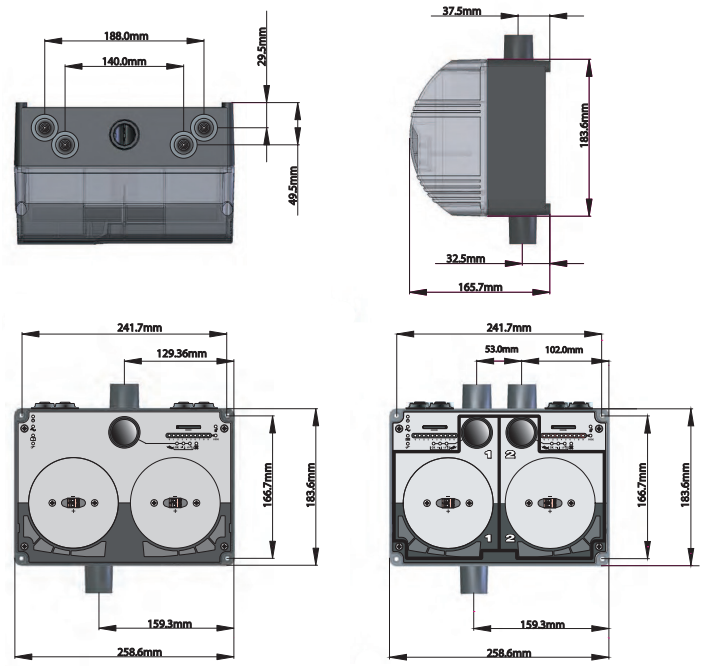
The EF-LASD utilises high sensitivity laser point detectors in an aspirated enclosure. Each detector monitors the air from separate sampling pipes, which allows for a large area of coverage using sampling holes in place of traditional point detectors.

Air is drawn from the protected area from one or two perforated 25mm pipes. A powerful fan together with sophisticated air-flow monitoring and control circuitry ensures that transport delays are minimised and air-flow is kept within working limits. System status and flow control is continuously displayed and internal power management ensures that operating current is kept to a minimum, allowing superior performance and optimisation of external power supply and standby battery resources.

Technical Specification

Mechanical	Sampling Pipe Inlets	1 or 2 (EF-LASD1 & EF-LASD2 respectively)
	Detectors	1 or 2, 0.06%/m Laser Point Detectors (fitted)
	Sampling Holes (Max)	18 Class C, 6 Class B, 3 Class A
	Sampling Pipe Length	100m (max) per pipe. For VdS approved installations, consult manual
	Sampling Pipe Diameter	1 or 2 x 25mm or 3/4" (27mm) nominal bore
	Exhaust Air Pipe Outlet	1 (25mm or 3/4")
Electrical	Supply Voltage	Nominal 24Vdc (18 to 30Vdc)
	Operating Current	350mA max (fan speed dependant)
	Sensitivity	0.06 - 3.33% obscuration per metre, adjustable in 9 stages
	Alarm Levels	Programmable Alert, Fire 1, Fire 2 (per channel)
	Operating Modes	Single detector, redundancy, double-knock
	Settings	Isolate, latching, non-latching, operating mode, reset
	Programming/set-up	Integral control switch's and/or PC via USB
	Event Log	1000 Events
	Fault Monitoring	Power failure (common), flow fault per channel, detector fault
	Relay Outputs	2 alarm & 1 fault per channel (changeover contacts)
	Cable Terminals	Removable 2.0mm maximum
	Display	5 common status plus 10 segment LED bargraph per channel
	User Controls	External weatherproof membrane - Code protected
	Flow Monitoring	Thermal, with adjustable high/low and sensitivity limits
Environmental	Operating Temperature	-10 to +50°C
	Operating Humidity	10 to 95% (non condensing)
	IP Rating	IP65 with exhaust pipe fitted and cable entries sealed
General	Filtration (Standard Internal)	Replaceable dust particle. Harsh environment filter also available
	Filtration (External)	Optional, external harsh environment filter
	Housing Material	ABS with tamper-proof locking mechanism
	Mounting	Upright, horizontal or inverted
	Weight	2.7kg
	Dimensions (W x H x D)	259 x 184 x 166mm
	Equipment Approvals	EN54-20, CE, VdS, CPD

Dimensions



Ordering Information

EF-LASD1	LASD-1 Laser Aspirating Smoke Detector
EF-LASD2	LASD-2 Laser Aspirating Smoke Detector
01-LDET	LASD Laser Detector Head Unit c/w Baffle
02-FL53	Replacement Filter Element, Coarse 20ppi (Pack of 10) ASD/LASD/E Series
20-LA0015-03	Key for ASD/LASD
28-001	1.5A True Load, Power Supply, 24VDC, 96-264V AC (EN54-4) 12AH Max
28-002	4A True Load, Power Supply, 24VDC, 96-264V AC (EN54-4) 17AH Max
VPS-250-E	External 5A PSU with Charger - EN54 Approved