

High Sensitivity Air Sampling Smoke Detector FIRElink-100



Features

- ▶ Ultra small, low cost aspirating smoke detector for easy and discreet installation
- ▶ High sensitivity provided by laser based forward light scatter for reliable early warning
- ▶ Two sampling pipes up to 100 m (aggregate) in length (still air)
- ▶ False alarms reduced by unique laser sensing technology - able to discriminate against dust
- ▶ RS485 communications built in as standard for networking and remote communications

Description

Model FIRElink-100 is designed to provide very high sensitivity smoke detection in a small package. A unique sensing technology ensures that the detector operates at optimum sensitivity for the protected environment, without the need for complex setup. This means the product will configure itself to provide high sensitivity in a computer room or reduced sensitivity in a smoky area. The detector is designed to fit into a Docking Station which accepts all sampling pipes and cables leaving the detector to be fitted during the final commissioning phase. This ensures that the detector is less likely to be damaged during installation. Volt-free Fire 1 and Fault relay outputs are provided for remote monitoring by local fire detection or BMS systems.

Specification

Order Code	FIRElink-100
Supply Voltage	21.6 - 26.4 VDC
Current Consumption	400 mA @ 24 VDC
Relay Contact Rating	500 mA @ 30 V
Operating Temperature Range	0 to +38 °C (UL268), -10 to + 60 °C (CEA4022)
Operating Humidity Range	0 - 90% non-condensing
Measurement Range (obs/m)	0.03% to 25% Full Scale Deflection (FSD) 0.0015% to 25% Sensitivity Resolution
Detection Principle	Laser light scattering mass detection and particle evaluation
Particle Sensitivity Range	0.003 µ to 10 µ
Dust Discrimination Principle	3D ³ Laser Dust Discrimination (LDD)
Maximum Sampling Pipe Length	50m (2 x 25 m or 1 x 35 m) moving air (>1 ms) OR 100 m (2 x 50 m OR 1 x 65 m) still air (max)
Sampling Pipe Diameter	¾" nominal bore (27 mm O/D) (EN54-20 performances)
Alarm Levels	2 - "FIRE" and "FAULT" (2 additional levels available with optional Relay Card or APIC fitted)
IP Rating	IP50
Sampling Pipe Inlets	2
Exhaust Air Pipe Outlets	1 (on optional Piped Exhaust docking station)
Weight(kg) / Size(mm)	3.8 (with docking station) / H220 x W300 x D85

The FIRElink range of sampling pipe, fittings and accessories are designed specifically for use with low pressure/high flow rate aspirating type smoke detection systems.

Our sampling pipe and fittings are manufactured from red ABS (Acrylonitrile Butadiene Styrene). This material was selected because it is easy to install, offers excellent rigidity, chemical resistance, impact strength and weather resistance.

Image	Part No.	Description	Colour
	FL-PIPE	Pipe 0.75 Diameter Nom Bore 3m Length	Red
	FL-SR	Socket	Red
	FL-90BR	90 Degree Bend	Red
	FL-45ER	45 Degree Elbow	Red
	FL-ECR	End Cap	Red
	FL-SUR	Socket Union	Red
	FL-TPR	'T' Piece	Red
	FL-SPA1	Standard Sampling Point Assembly	As Shown
	FL-SPA2	Detachable Sampling Point Assembly	As Shown
	FL-PSPA	Patress Sampling Point Assembly	As Shown
	FL-BSPA	Bulkhead Sampling Point Assembly 20mm	As Shown
	FL90PSP	90 Degree Patress Sampling Point	As Shown
	FL-SG	Socket	Grey
	FL-ECG	End Cap	Grey
	FL-ISPAG	Inline Sample Point Adapter 25mm Grey	Grey
	FL-FSR	0.75 to 25mm Female Socket	Red
	FL-AD2R	25mm Female to 0.75 Male Adapter	Red
	FL-AD1R	0.75 Female to 25mm Male Adapter	Red
	FL-PCR	Pipe Clip	Red
	FL-SC	Solvent Cement for FIRElink Pipe	Clear
	FL-PC	Pipe Cleaner for FIRElink	-
	FL-WL	Sampling Hole Warning Labels	As Shown