

LIFE SAFETY & INCIDENT MANAGEMENT

Edwards ModuLaser® Standard Display Module



7259-2342:0501



Overview

ModuLaser is a scalable aspirating smoke detection solution that makes installation easier, maintenance quicker, and takes applications further than traditional air sampling detectors. Two basic module types comprise the ModuLaser solution: a display module, and a detector module. Each detector module can accommodate up to 250 m / 820 ft. of combined sampling pipe. Display modules and detector modules communicate by RS-485 interconnections.

Display modules are available in three configurations: Standard with TFT color display, status LED's and navigation buttons, Minimum with only status LED's, and Command which is similar to the Standard but with the added functionality to control various modules over SenseNET. The Minimum and Standard Display Modules can each support up to 8 detector modules, while the Command Display Module can support up to 127 modules across the SenseNET network.

Standard display module

The Standard Display Module features a user interface which consist of a TFT color display, navigation buttons and status LED's. Configuration of the Standard Display Module (and associated detectors modules) can be done via the user interface, via a computer using Remote software or via SenseNET using a Command Display Module. The TFT color display support simple operations like changing configuration options via a menu driven structure, but also advanced features like viewing the chart recording in graphical format.

The Standard Display Module has two USB ports, one master and one slave. The master is used to connect a pen drive/memory stick, which in turn can be used for storing the configuration, the event logs or chart recordings, or for firmware upgrade purposes. While the USB slave is used to connect to a computer.

Perfect solution

Thanks to advanced features that make it virtually impervious to dust and dirt, ModuLaser is ideal for use in hostile environments that would disable other kinds of smoke detectors. Forward scattering optical detection adds early warning capability without the risk of nuisance alarms normally associated with high sensitivity smoke detection, while exclusive environmental compensation technology adds a high degree of reliability to an already solid detection solution.

Standard Features

- Modular Design**
 Separate centrally-controllable detector modules allow efficient piping and discrete zones with no overlap.
- Zoned aspirating smoke detection**
 Individual detector modules provide detection for individual areas or zones, specific zone alarm information can be transmitted to the main fire alarm panel through dedicated alarm relays within each detector module.
- Simplified installation**
 Ingenious docking station design allows detectors to be easily connected together as a group. Sensitive electronics are easily removed to ensure they will not be damaged during first fix installation. Aspirating pipework and cable entries can easily be made into either the top or the bottom of the unit.
- Intuitive user interface**
 Bright easy-to-see color TFT display and universal navigation and control buttons take the guesswork out of programming and diagnostics.
- Easy pipe connection**
 The quick fit pipe adaptor system locks down securely, yet leaves plenty of room for easy pipe connection and removal.
- Quick location of smoke**
 Each detector module is self-contained, which means no delays in determining in which zone (sampling pipe) smoke is present.

Specifications

General

Status indication	LED's
User interface	TFT and navigation buttons on Normal and Command Display Modules
Alarm levels	4 (Aux, Pre-alarm, Alarm and Alarm 2)
Event log	20,000 events per module
RS485 support	Yes (SenseNET and SenseNET+)
Connectivity	USB (x2) on Display Module

Electrical

Operating voltage	24 VDC nominal (18.0vdc to 30Vdc)
Current consumption	Display Module (at 24 VDC): Standby - 266 ma Alarm - 266 ma
SenseNet, SenseNet+	Twisted pair wire, 32 ohms, .44uf max

Detection

Detection principle	Laser light scattering mass detection and particle evaluation
Particle sensitivity range	0.003 to 10 microns

Sampling pipe

Length	Up to 250 m / 820 ft* combined per detector module
Quantity sampling holes	Up to 50*

*Sampling pipe design with PipeCAD, including classification of configuration

Inlet size	1.06 or 0.98 in. (27 or 25 mm) outer diameter
Inlet location	Top or bottom
Exhaust size	1.06 or 0.98 in. (27 or 25 mm) outer diameter
Exhaust location	Top or bottom
Inlet quantity	1 per detector module

Input

Input quantity	2 per module
Input type and rating	Supervised
Termination	15 K Ω 5% 1/4 W
Programmable	Yes

Output

Output quantity	3 per module
Output type and rating	Voltage free (contact rating 2 A at 30 VDC / NO/NC/C)
Programmable	Yes

Physical

Physical dimensions	(W x D x H) 4.35 x 5.25 x 11.8 in. (110.5 x 133.5 x 300 mm)
Net weight	Display Module: 2.6 lb. (1.18 Kg) Detector Module: 3.46 lb. (1.57 Kg)
Color	Cream (RAL 9016)
Mounting type	19" rack, Surface mount
Cable entries	2 at the bottom, 2 at the rear, 2 at the top on Detector Module, and 3 at the top on the Display Module
Cable entry size	0.5 in. (20 mm) - top and bottom
Detector module orientation	Vertical (0 deg or 180 deg)

Environmental

Wire Size (all terminals)	14 to 18awg
Operating temperature	0 to +38°C (UL) 0 to +49°C (FM)
Relative humidity	0 to 90% noncondensing
Environment	Indoor
IP rating	IP40

Standards & regulation

Certification	FM, UL 268 7th edition, CSFM
Approved for use as open area protection and special application, as per UL268	

Chart recorder

Sampling period	Adjustable between 1s and 60 s
Capacity	1 months @ 1s / Up to 5 years @ 60 s
Values recorded	Detector value, 4 alarm level values, flow value and temperature (all simultaneously)

Ordering Information

FHSD8310-ULF	Standard Modulaser Display and control module 4.4 lbs
9-30792	Display cover, replacement 0.23 lbs
9-30794	Gromets, replacement 0.23 lbs
9-30797	Accessory Kit 0.23 lbs
9-30798-2	Wiring Housing, Gray 3.3 lbs
9-30699N-P	Filter pack (6), replacement 0.56 lbs



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