Fike®
Protection Systems

VESDA LaserPLUS
Display Module

UL: S5198, FM: OB5A5.AY
SSL, LPCB

CATALOG NUMBER 1143

Display Module

The Display Module provides a real-time indication of the status of a VESDA LaserPLUS Detector. It has a 20-segment vertical bargraph, a 2-digit numerical display, an audible sounder, and clear alarm and fault indicators. It also has 4 push-buttons to control the Detector and the mode of the Display.

Features

- Four Alarm Levels
  (Alert, Action, Fire 1 & Fire 2)
- 20-Segment Vertical Bargraph
- Alarm Threshold Indicators
  (Alert, Action & Fire 1)
- Audio and Visual Indication
- Alarm Indicators
- Informative Fault Indicators
- Multi-mode Numeric Display
  (defaults to smoke obscuration)
- Acknowledged Push Button
  Presses
- Multiple Language Supported
- Addressable to any Detector

Description

The Display Module provides a clear indication of status of a VESDA LaserPLUS Detector.

It is a detachable assembly which can be mounted in a Detector unit, as a remote unit or in a 19" rack. The module can therefore be mounted in the optimum location either with, or separate from, the Detector. Several Displays can be configured to display information from a single Detector.

Smoke Indication

Smoke levels are continuously shown by an illuminated bargraph. Each segment indicates an increase in the detected smoke level. The top segment is equal to the Fire1 threshold so that each segment represents 1/20 of the Fire1 smoke level. To the left of the bargraph are the Fire1, Action, and Alert threshold indicators. At a glance this provides a visual representation of the programmed threshold levels and how close the smoke level is to reaching each threshold.

Numerical Display

The 2-digit numerical readout has a number of modes which are indicated by four LED's:
- The current smoke level in %obscuration/ft (%obscuration/m).
- The sensitivity or Fire 1 threshold in %obscuration/ft (%obscuration/m).
- The VESDA zone number.
- On the Scanner Display, the "First Alarm Sector" automatically illuminates when a smoke condition is detected.
- On the Scanner Display, the sector (pipe) number for the information being displayed is illuminated.

Push-Buttons

Four dual function push-buttons enable users to reset or isolate the Detector and control the function and mode of the Display Module.

They can be disabled when the system is commissioned to prevent general access.

A test routine is initiated by pressing the "mode" push-button for two seconds. The presence and status of the Detector and associated Displays are constantly checked via VESDA*net*™.
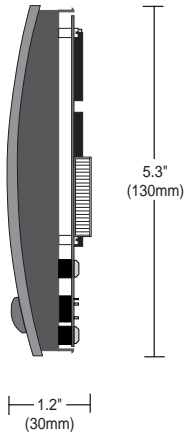
Status Lights

Four bright flashing LED's provide clear warning of a fire condition. Each is accompanied by an audible warning. Similarly, any fault condition is indicated by clearly labeled LED's and an audible tone. The audible warning is easily silenced by the press of a push-button at which point any flashing LED's are permanently illuminated until the cause of the event is identified and the system reset.
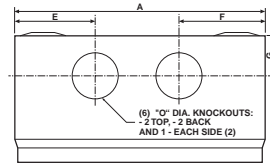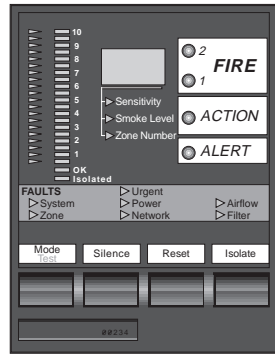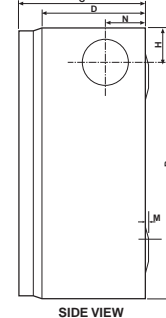
Display Module (side view)
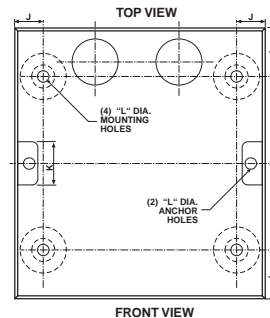

5.3" (130mm)

1.2" (30mm)

Display Module (front view)


```
 10
  9
  8
  7
  6                    ○ 2    FIRE
  5                    ○ 1
  4    ▶ Sensitivity
  3    ▶ Smoke Level   ○ ACTION
  2    ▶ Zone Number
  1                    ○ ALERT
    ▪ OK
    ▪ Isolated
FAULTS
▷ System   ▷ Urgent    ▷ Airflow
▷ Zone     ▷ Power     ▷ Filter
           ▷ Network

Mode/Test   Silence   Reset   Isolate

#2234
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4.1" (105mm)

Remote Mounting Box

TOP VIEW

(6) "O" DIA. KNOCKOUTS: - 2 TOP, - 2 BACK AND 1 - EACH SIDE (2)

(4) "L" DIA. MOUNTING HOLES

(2) "L" DIA. ANCHOR HOLES

FRONT VIEW

SIDE VIEW

Dimensions		
	in	mm
A	5.5	140
B	5.9	150
C	2.75	70
D	2.36	60
E	1.75	44.5
F	1.9	48
G	.9	23
H	.98	25
I	1.1	27.5
J	.65	16.5
K	.98	25
L	.25	6.4
M	.06	1.6
N	.91	23
O	1.0	26

19" Sub Rack

TOP VIEW

FRONT VIEW
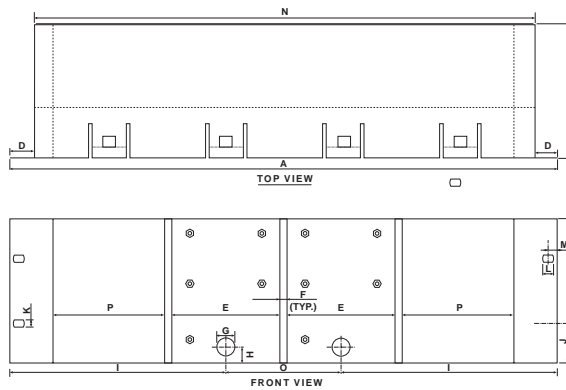
Dimensions		
	in	mm
A	19	482
B	5	128
C	4.75	120
D	.82	21
E	3.82	97.2
F	.25	6.4
G	.62	16
H	.56	14
I	7.50	190
J	1.4	36
K	.28	7
L	.39	10
M	.31	8
N	17.37	440
O	4	102
P	4	98.5

Supply Voltage:
18-30VDC (when used in Detector Unit, Remote Unit or 19" Rack)

Power Consumption:
1.6 watts quiescent plus 0.6 watts alarm (module only)
2.4 watts quiescent plus 0.6 watts alarm (in remote mounting box)

Current Consumption:
60mA quiescent plus 20mA alarm (@24VCD - module only)
90mA quiescent plus 20mA alarm (@24VDC, in remote mounting box)

Dimensions (WHD):
Mounted in Remote Box -
5.5" x 5.9" x 3.5"
(140mm x 150mm x 90mm)

Operating Temperature:
32° to 102°F (0° to 39°C)
Humidity: 10-95%RH, noncondensing

Alarm Indicators:
Luminosity highly visible with 70 degree viewing angle

Push-Buttons:
Can be disabled during commissioning (except silence). Return a short tone when enabled and a long tone when disabled
Mode/Test (Dual Function):
Short press: Selects a sequence of modes on the numerical display.
The sequence is Sensitivity, Smoke Level, and Zone Number.
For Scanner Displays, the "First sector/pipe in alarm" can be selected.
Note: The current display mode is indicated by the appropriate LED's
Long press: Activates the Test Mode.
Silence (Silence/Scan):
(Dual function on Scanner only):
Short press: Silences any alarm or fault warnings. Flashing LED's are then permanently lit until the event is cleared and the system reset. Only affects the local display.
Long press: Causes the product to scan each pipe individually for smoke and display the current levels.

Reset:
Resets the Detector and all the Displays associated with it.
If the alarm or fault condition has not been cleared then the appropriate indications will be repeated. Reset does not clear the isolate mode.

Isolate:
Isolates the Detector from any external devices or systems.
This includes all the relays (internal and in remote units)
Isolate relays are activated while the Detector is in isolate mode.

Fault Indicators:
System: A fault which affects the whole system (i.e. any device on VESDA*net*™).
Zone: A fault which affects only the Detector or its associated Displays.
Urgent: A serious fault that requires immediate attention.
This light will only illuminate when at least one other fault light is lit.
Power: A fault with the power supply, either AC or battery backup.
Network: A break in the VESDA*net* communications link.
Airflow: Airflow drift. "Urgent" indicates serious aspirator or pipe failure.
Filter: Filter needs replacing.

Ordering Information:
68-018   Remote display with 7 relays
68-019   Remote display only

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