



GENERAL MONITORS
Protection for life.

FIELD MOUNTED DISPLAY



Features

- Four-digit Backlit LCD Display
- Loop Powered or +24VDC
- Software Selectable Settings
- Program Review
- Optional Relays
- Relay Inhibit Mode

Benefits

- Continuously visible indication of concentration
- Variety of applications
- Ease of operation and enhanced reliability
- Review all option settings
- Application flexibility
- Allows gas checking with outputs disabled



Description

The General Monitors Field Mounted Display (FMD) is a four-digit backlit LCD readout which provides a display value proportional to sensed current. It is designed for use with General Monitors' Models TS400, TS420, IR2100 and IR7000.

It is available in an explosion-proof junction box for explosion-proof and general-purpose installations, and in a glass-reinforced polyester junction box for increased safety and general-purpose installations.

For explosion-proof and general purpose installations, the FMD is +24VDC (nominal) powered. Optional relays provide output of warning, alarm and fault conditions at the sensor. Operating mode, display range, warning, and alarm set points are user-selectable via a magnetically activated switch. Relays are user-programmable as latching or non-latching, normally de-energized or normally energized. Latching relays can be reset via a remote reset input or via the magnetic switch.

For intrinsically safe installations, the FMD is 4-20mA loop powered and provides a local display for the TS400 and TS420. The display range can be selected via a magnetically activated switch to match the sensor range on the TS400/TS420. The operational mode and gas concentration is displayed on the 4-digit display.

Operating Modes -

TS400/TS420

Fault Current	<3.5mA
Start up	3.6mA
Calibration	3.75mA
Operational	4-20mA
Over-range	>21mA

IR2100/IR7000

Fault Current	<1.0mA
Zero/Calibration	1.5mA
Beam Block	2.0mA
Operational	4-20mA
Over-range	>21mA



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The Field Mounted Display (FMD) is a 4 digit LCD display module designed for use with the Models TS400, TS420, IR2100, and IR7000. The product is available in both the standard explosion-proof (X/P) junction box for explosion-proof and general purpose (GP) installations, and a polyester junction box for increased safety (Exe), and general purpose installations. The following variations are available:

+24VDC Powered	Relays	Classification	Product(s)
Yes	Opt.	X/P, Exe	IR2100/ IR7000
Yes	Opt.	X/P, GP	TS400/ TS420
Zero Switch	Opt.	X/P	IR2100/ IR7000
Yes	Opt.	GP, Exe	TS400/ TS420

System Specifications

Display Ranges: 1.0, 3.0, 5.0, 10.0, 20.0, 25.0, 50.0, 100, 500, 1000, 2000, 5000

Electrical

Classification: Explosion-proof (XP) Housing: Class I, Div. 1 & 2, Groups B, C, & D; Class II, Div. 1 & 2, Groups E, F, & G; Class III; Class 1, Zone 1 & 2, Group IIB + H2, T6
Polyester Housing: Class I, Zone 0, 1, & 2, Group IIC, T6 EEx ia/ EExe, IIC, T6

Warranty: Two Years

Approvals: UL, CUL - GP version only; CSA - XP version only; CENELEC & CE Marking

Environmental Specifications

Operating Temperature Range: -40°F to 167°F (-40°C to +75°C)
Note: Limited by operating temperature of the attached gas detector.

Storage Temperature Range: -40°F to 185°F (-40°C to +85°C)

Operating Humidity Range: 5% to 100% RH, non-condensing

Electrical Specifications

Input Power: 20-36 VDC @ 50mA max.

Accuracy: ±1% of input signal

Relay Ratings: 2A @ 30 VDC, 0.5A @ 125 VAC resistive load max. (3X SPDT) - Fault, Warning, and Alarm

Status Indicators: Four (4) digit backlit LCD

Mechanical Specifications

Dimensions:	Explosion-proof Housing	Polyester Housing
	6.4"L x 4.1"W x 3.4"H (161mm x 104mm x 86mm)	4.72"L x 4.72"W x 3.15"H (120mm x 120mm x 80mm)

Weight:	5.6 lbs. (2.5kg)	2.4 lbs. (1.09kg)
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Mounting Holes:	5 inches (127mm) center to center	4.07 inches (103mm) corner to corner
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Standard Configuration:	FMD-3-2-1-1-06-1-1	FMD-3-2-1-1-06-1-2
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Specifications subject to change without notice.

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