

GM50-R Repeater

Repeater Panel for GM50 Detectors



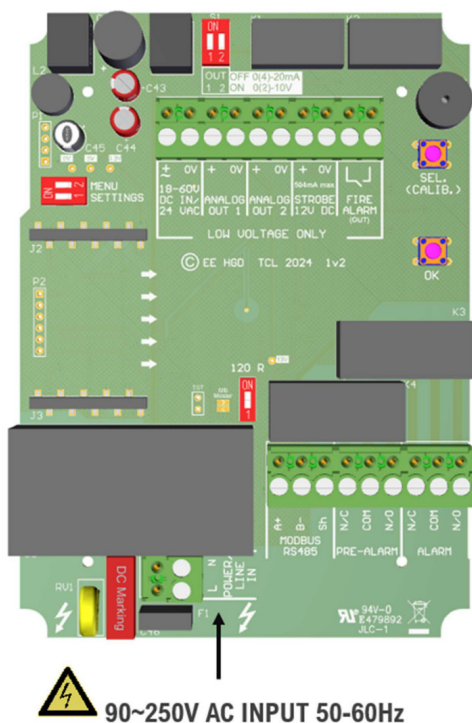
Product Overview:

The CGS GM50-R Repeater provides a clear, remote display and alarm interface for connected gas detectors. It mirrors detector status, alarms, and outputs in real time, ensuring critical information is always accessible. Compact and easy to install, it offers both visual/audible alarms and configurable relay/analogue outputs. Ideal for compressed gases the GM50-R enhances safety and compliance monitoring.

Model Numbers and Outputs:

MODEL NUMBER	GAS TYPE AND RANGE	Typical Application	COMMUNICATION	Fan Control	DISPLAY
GM50-R-H2	Hydrogen	Battery Charging	Modbus RTU	Analog or Relay	Traffic Light Display
GM50-R-O2	Oxygen Depletion	Compressed Gases	Modbus RTU	Analog or Relay	Traffic Light Display
GM50-R-CO2	Carbon Dioxide	CO2 Cylinders	Modbus RTU	Analog or Relay	Traffic Light Display

Circuit Board Diagram:



CONNECTION

LABEL

Low Voltage Power Input
18-60VDC or 24VAC

+/- 0V

Selectable
4-20mA or 0-10V

Analog Out

12VDC Strobe
Output

Strobe

Modbus Output

RS-485

10A SPDT Form C Relay

Pre Alarm / Alarm

90-250VAC Input

Power / Line In

Normally Open 1A Relay

Fire Alarm

Specification

General	
Model:	GM50-R
System Target Gases:	Repeater for GM50 Gas Detection System
Size: (H x W x D)	5.95 x 4.37 x 1.97" (151 x 111 x 50mm)
Housing Material:	ABS PA765. Flame Retardant UL 94V-1
Mounting:	Safe Zone - Indoor use - Wall Mounted
Weight:	212g
User Interface	
Display:	1.8" TFT
Screen Brightness:	Non-Adjustable
Visual Indicators:	Gas Level (Green: Normal; Yellow: Pre-Alarm; Red: Alarm)
Audible Alarm:	>80dB @ 3.28ft (1m). Quiet conditions.
Language:	English
Power Supply	
Rated Power:	26 VA @ 120VAC
Rated Voltage:	90-250 VAC
Relays	
Fire alarm relay	1A
Pre-alarm 1% Vol (25% LEL) Main alarm 2% Vol (50% LEL) voltage-free relay outputs:	10A switching current (resistive load)
Environmental	
Operating:	14~104°F / 20 ~ 90% RH (non-condensing)
Storage:	14~104°F / 20 ~ 90% RH (no condensation)
Altitude Rating:	2000m
Wiring	
Typical	Power wiring should apply to all applicable codes. 120VAC & alarm relay outputs 14-16AWG / 24V DC 16-18AWG
Approvals	
Electrical Safety & EMC	CE / UKCA BS EN 61010-1:2010 +A1:2019. & BS EN 50270 / FCC CRF 47part 15B

