

## AGD/GD/GDR/GD2R SERIES MAVIGARD ADDRESSABLE AND CONVANTIONEL GAS DETECTORS (METHANE/LPG/CO)

User friendly Mavigard gas detectors provide wide applicability and reliable gas safety. Gas detectors detect gas leakage in house, garage etc. It provides audible and visual alarms. There are two optional models as 12/24V DC or 230V AC 50 Hz.



### Methane and LPG Detectors

- Methane and LPG detectors are suitable for storage, office, workshop. Also, suitable for place where can have gas leakage such as kitchen, bathroom, stokehold, heating system, cistern, cellar, corridor.
- Lower Explosion Level - LEL is concentration limit which is explosion and deflagration can not be occurred. Methane (Natural-gas) LEL value is %5, LPG value is (Butane +Propane ) %2,1.
- MaviGard Methane or LPG detectors send alarm signal when the gas level reach %10 LEL.

### Carbon-monoxide Detectors

- Vehicles like automobiles, buses etc. exhaust carbon monoxide gas while working in closed garages. Therefore carbon monoxide detectors should be placed in closed garages. Carbon monoxide alarm mustn't placed outside the building, in the cupboard, in a damp or humid area, directly above the fuel burning appliance, behind the cupboard which prevents the air circulation and places where the temperature is very high or low.
- Don't use the carbon monoxide alarm for detection of other gases or smoke. Concentrations of poisonous gases measured by unit of ppm (parts per million). MaviGard carbon monoxide gas detectors will respond audible and visually when the carbon monoxide concentration reaches 50ppm.
- Concentrations of poisonous gases measured by unit of ppm (parts per million). Mavigard carbon-monoxide detectors will respond audible and visually when the carbon-monoxide concentration reaches 50 ppm. 1.alarm level 50 ppm, 2.alarm level 200 ppm in two level optional products.

## PRODUCT FEATURES

- System normal operation, detectors fault and gas alarm information can be seen via three LED. LED and buzzer operation control with test button
- Internal buzzer
- 12V DC/24V DC or 230V AC supply options
- 127 gas detectors can be connected to each loop
- Optional models that have 2 level alarm threshold value
- Optional c/w relay models are compatible with fire and security panels

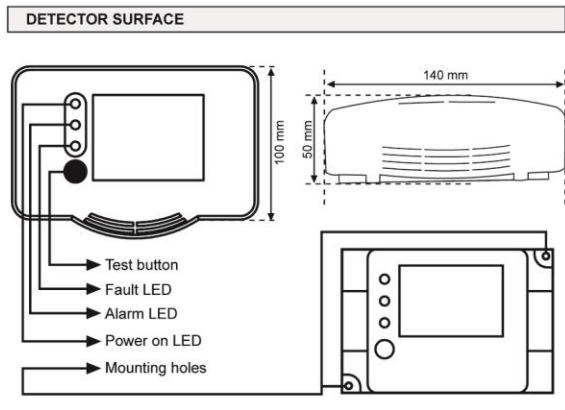
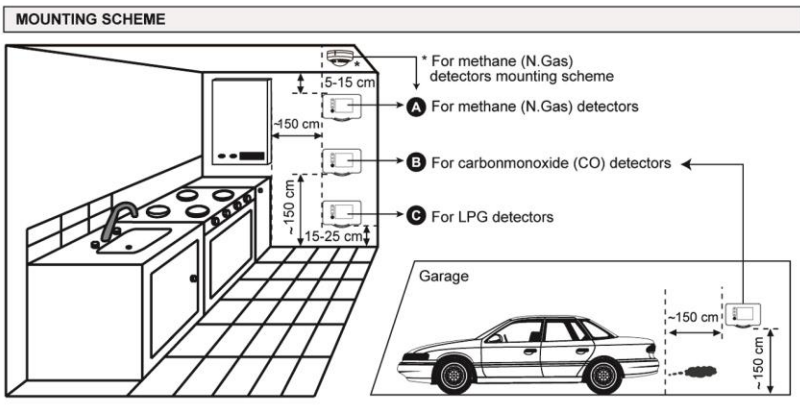
## MODELS

CONVANTIONAL GAS DETECTORS	
Model	Description
GDR-1224L	LPG Detector, 12/24V DC, c/w relay
GDR-1224M	Methane Detector, 12/24V DC, c/w relay
GDR-220L	LPG Detector, 230V AC, c/w relay
GDR-220M	Methane Detector, 230V AC, c/w relay
GD2R-12EC	Carbon-monoxide Detector, 12V DC, two alarm level outputs, c/w relay
GD2R-24EC	Carbon-monoxide Detector, 24V DC, two alarm level outputs, c/w relay
GD2R-220EC	Carbon-monoxide Detector, 230V AC, two alarm level outputs, c/w relay
GD-220L	LPG Detector, 230V AC
GD-220M	Methane Detector, 230V AC
GD-220EC	Carbon-monoxide Detector, 230V AC
TGDR-1224M	MaviGard gas detector for methane, 12/24V DC, with relay output; ceiling mounted (requires detector base)

ADDRESSABLE GAS DETECTORS	
Model	Description
AGD-1224L	LPG Detector, 12/24V DC
AGD-1224M	Methane Detector, 12/24V DC
AGD-1224EC	Carbon-monoxide Detector, 12/24V DC
AGD-220L	LPG Detector, 230V AC
AGD-220M	Methane Detector, 230V AC
AGD-220EC	Carbon-monoxide Detector, 230V AC

## TECHNICAL SPECIFICATION

	<b>AGD-1224L</b>	<b>AGD-1224M</b>	<b>AGD-1224EC</b>	<b>AGD-220L</b>	<b>AGD-220M</b>	<b>AGD-220EC</b>	
<b>Model Type</b>	Addressable	Addressable	Addressable	Addressable	Addressable	Addressable	
<b>Gas Type</b>	LPG	N.Gas	CO	LPG	N.Gas	CO	
<b>Alarm Level</b>	%10LEL	%10LEL	50ppm	%10LEL	%10LEL	50ppm	
<b>Power Supply</b>	12/24 V DC	12/24 V DC	12/24 V DC	230 V AC	230 V AC	230 V AC	
<b>Relay Output</b>	None	None	None	None	None	None	
<b>Weigth</b>	240g	240g	240g	240g	240g	240g	
<b>Warm-Up Time</b>	120sn	120sn	120sn	120sn	120sn	120sn	
<b>Alarm Time</b>	<10sn	<10sn	<30sn	<10sn	<10sn	<30sn	
	<b>GDR-1224L</b>	<b>GDR-1224M</b>	<b>GDR-220L</b>	<b>GDR-220M</b>	<b>GD-220L</b>	<b>GD-220M</b>	<b>GD-220EC</b>
<b>Model Type</b>	Conventional	Conventional	Conventional	Conventional	Conventional	Conventional	Conventional
<b>Gas Type</b>	LPG	N.Gas	LPG	N.Gas	LPG	N.Gas	CO
<b>Alarm Level</b>	%10LEL	%10LEL	%10LEL	%10LEL	%10LEL	%10LEL	50ppm
<b>Power Supply</b>	12/24 V DC	12/24 V DC	230 V AC	230 V AC	230 V AC	230 V AC	230 V AC
<b>Relay Output</b>	10A 250V AC 8A 30V DC	10A 250V AC 8A 30V DC	10A 250V AC 8A 30V DC	10A 250V AC 8A 30V DC	Yok	Yok	Yok
<b>Weigth</b>	240g	240g	240g	240g	240g	240g	240g
<b>Warm-Up Time</b>	120sn	120sn	120sn	120sn	120sn	120sn	120sn
<b>Alarm Time</b>	<10sn	<10sn	<10sn	<10sn	<10sn	<10sn	<30sn
	<b>GD2R-12EC</b>	<b>GD2R-24EC</b>	<b>GD2R-220EC</b>	<b>TGDR-1224M</b>			
<b>Model Type</b>	Conventional	Conventional	Conventional	Conventional			
<b>Gas Type</b>	CO	CO	CO	N.Gas			
<b>Alarm Level</b>	1. Level: 50ppm 2. Level: 200ppm	1. Level: 50ppm 2. Level: 200ppm	1. Level: 50ppm 2. Level: 200ppm	%10 LEL			
<b>Power Supply</b>	12 V DC	24 V DC	230 V AC	12/24V DC			
<b>Relay Output</b>	1. Level R: 10A 250V AC 8A 30V DC 2. Level R: 500mA 50V DC	1. Level R: 10A 250V AC 8A 30V DC 2. Level R: 500mA 50V DC	1. Level R: 10A 250V AC 8A 30V DC 2. Level R: 500mA 50V DC	30V DC 2A			
<b>Weigth</b>	240g	240g	240g	145g			
<b>Warm-Up Time</b>	120sn	120sn	120sn	120sn			
<b>Alarm Time</b>	<30sn	<30sn	<30sn	<10sn			



### TABLE OF CONNECTION DIAGRAMS

AGD SERIES CONVENTIONAL GAS DETECTORS		
DETECTOR MODEL	POWER SUPPLY CONNECTION	LOOP CONNECTION
AGD-1224L AGD-1224M AGD-1224EC	<p>AGD-1224 series: 12-24V DC external power supply.</p>	
AGD-220L AGD-220M AGD-220EC	<p>AGD-220 series: 230V AC 50-60 Hz external power supply.</p>	

GD/GDR/GD2R SERIES CONVENTIONAL GAS DETECTORS				
DETECTOR MODEL	POWER SUPPLY CONNECTION	FIRE ALARM CONTROL PANEL CONNECTION	SECURITY PANEL CONNECTION	RELAY OUTPUT USING
GDR-1224L GDR-1224M GD2R-12EC GD2R-24EC	<p>GDR-1224 series: 12-24V DC external power supply. GD2R-12EC: 12V DC external power supply. GD2R-24EC: 24V DC external power supply.</p>	<p>(*) For only GD2R series gas detectors</p>	<p>(*) For only GD2R series gas detectors</p>	<p>(*) For only GD2R series gas detectors</p>
GDR-220L GDR-220M GD2R-220EC	<p>GDR-220 series: 230V AC 50-60 Hz external power supply.</p>	<p>1.NO : Level 1 relay, Normally open 1.C : Level 1 relay, Normally close 2.NO : Level 2 relay, Normally open 2.C : Level 2 relay, Common</p>	<p>1.NO : Level 1 relay, Normally open 1.C : Level 1 relay, Common 1.NC : Level 1 relay, Normally close 2.NO : Level 2 relay, Normally open 2.C : Level 2 relay, Common</p>	<p>1.NO : Level 1 relay, Normally open 1.C : Level 1 relay, Common 1.NC : Level 1 relay, Normally close 2.NO : Level 2 relay, Normally open 2.C : Level 2 relay, Common</p>

TGDR-1224M GAS DETECTOR CONNECTION DIAGRAM			
<p>GD-220L GD-220M GD-220EC</p> <p>GD-220 series: 230V AC 50-60 Hz external power supply.</p>	<p>Supply Voltage Connection</p>	<p>Fire Alarm Control Panel Connection</p>	<p>Relay Output Using</p>
<p>1: (+) 2: C (Common) 3: (-) 4*: NC (Normally Closed) * NO switch option for special orders</p>			