

# GM-416-WP

## Gas Monitoring System



**AMBETRONICS**  
AN ISO 9001:2015 CERTIFIED COMPANY

### Features

- 8,16 & 24 channel MODBUS ID monitoring system for Gas Detectors/ Gas Transmitters having RS-485 MODBUS RTU network connectivity on 4 wire technology.
- Ring topology possibility for redundancy, so if wire break, system runs.
- Multidrop RS-485 port eliminates separate cabling to each Detector, Multichannel communicator panel.
- Display scan all channel (8,16 & 24) within programmable scan time 1 to 999 sec.
- 2 numbers of Digital Input .
- 2 x 4 digit LED display with 32 LED's.
- Integrated Buzzer/3 numbers SPDT Relay for Warning.
- Password protected menu with password changing facility.
- Easy handling & programming with 3 keys on front panel.



### Applications

- Bullet Yards / Storage yards
- Gas cylinder storage & Gas refilling station
- Building management services
- Breweries, Steel Plants, Gas Turbines.
- Leak detection, Solvent Vapours.
- Personal Monitoring, Compressor Stations.
- Pulp & Paper Industry, Fuel Loading Facilities.
- Shopping Malls.
- Gas station / Gas manifold
- Gas Cylinder Bank area
- Chemical & Hazardous area where data monitoring is essential.
- Gas Pipeline projects
- Burner / Furnace area
- Heat Treatment plants

## TECHNICAL SPECIFICATIONS

### General :

- Input** : 8,16,24 detectors having RS-485 MODBUS RTU port
- Display** : 2 x 4 digit L.E.D. Seven Segement Display
- Status indication** : DI-1 for Digital Input Signal-1  
DI-2 for Digital Input Signal-2  
COM-1 indicate communication between master & slave devices.  
COM-2 indicate repeater communication between devices/ PLC/ SCADA.  
RLY-1 To Indicate Relay 1 is ON  
RLY-2 To Indicate Relay 2 is ON  
RLY-3 To Indicate Relay 3 is ON  
HTR To Indicate Hooter is ON

8 Channel	16 Channel	24 Channel
8 LED for Alarm1	16 LED for 16	24 LED for 24
8 LED for Alarm2	Channel each having	Channel each having
8 LED for Fault	3 function (AL1, AL2 & FLT)	3 function (AL1, AL2 & FLT)

- Control action** : 3 independent Relays common for all channels operate as per slave status.
- Audible Indication** : Integrated buzzer & Hooter for Alarm Set point violation.
- Range & Resolution** : 0,0.1 & 0.01

### Environmental :

- Operating Temperature** : 0 to 50°C
- Humidity** : Less than 95%RH Non-Condensing.

### Electrical :

- Supply Voltage** : 90 TO 270 VAC, Typically 230 VAC
- For Slave Device** : Less than 1.5 Amp at 24VDC for 8 channel  
Junction box with SMPS will be required for 16 & 24 Channel

### Accessories :

- Weatherproof enclosure for inter connection between Detector & Multichannel communicator.
- 24VDC Operated Hooter Cum Flasher.

### Communication :

- Communication Port** : Isolated RS-485 communication with MODBUS RTU Protocol for Master & Slave
- Settings** : Baud rate (9.6, 19.2), Parity(O/E/N), Stop bits(1/2)
- No of Slave ID** : 1-250

### Error Monitoring

- ERR indication for OPEN / OVER range of slave devices
- RE-ET to indicate Read error/Communication cable break / improper setting communication parameters with slave devices.

**MUST FOR HUMAN & INDUSTRIAL SAFETY**

## Relay

- 1) 3 Nos. SPDT Relay of Rating "NO CONTACT: 10A 250VAC/5A 30VDC  
NC CONTACT: 3A 125VAC/3A 30VDC"
- 2) Relay 1 for Alarm 1, Relay 2 for Alarm 2 & Relay 3 for Fault

## Programmable Parameters

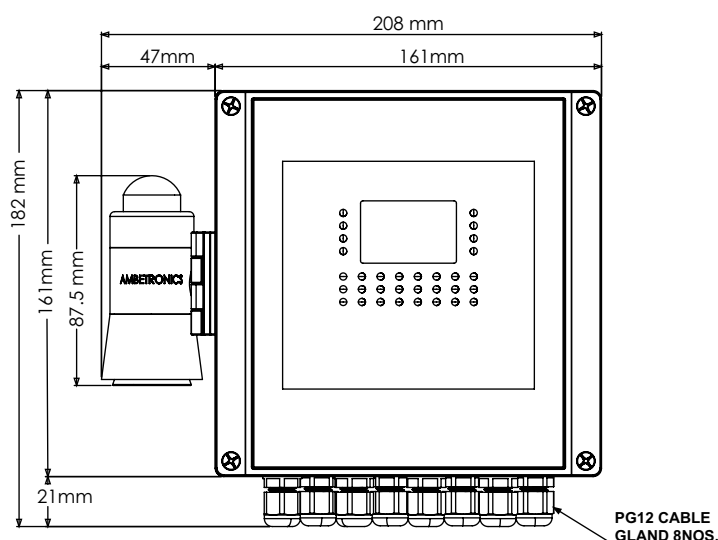
- Set point** : 2 Nos. AL1, AL2 User Settable in device & configurable through Modbus Protocol
- Settings** : 3 Nos. keys on front side with password protection for Weatherproof Model.
- Logic** : LOW-LOW, HIGH-HIGH, LOW-HIGH User Settable

## Weatherproof Housing

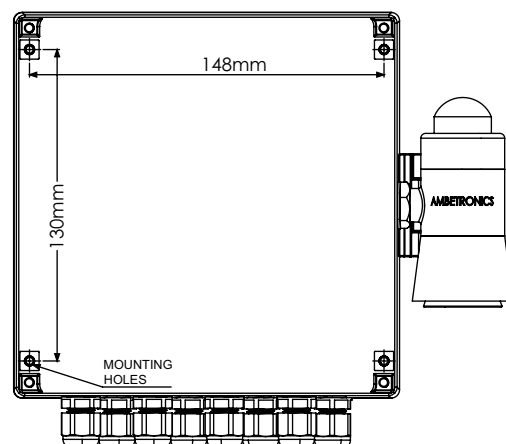
- Cabinet Material** : ABS Plastic
- Cable Entry** : PG 12 cable gland
- Mounting** : Wall Mounting
- Dimension** : 182 mm (H) with Cable gland x 214 mm (W) with Hooter Cum Flasher x 81.5 mm (D)
- Weight** : Approx. 950 g.

## WEATHERPROOF ENCLOSURE DIMENSION & MOUNTING DETAILS

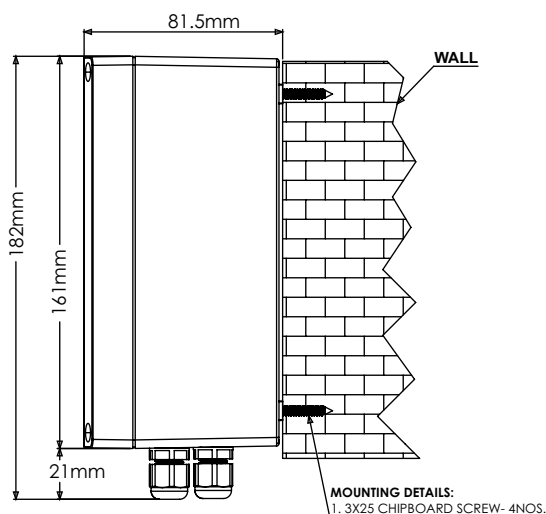
**FRONT VIEW**



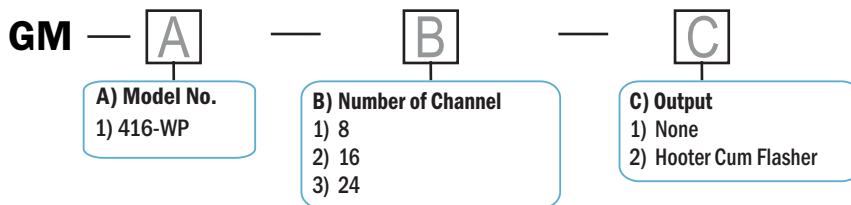
**BACK VIEW**



**SIDE VIEW**



## ORDERING INFORMATION



\* Before placing order please refer the above ordering information or contact below address for assistance.

Manufactured by :



**AMBETRONICS ENGINEERS PVT. LTD.**

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