

GAS MONITORING SYSTEM

Approval & Compliance

- Approval & Compliance for Flameproof Certified to Ex-d IIC T6 Gb, IP66
- CIMFR CERTIFICATE NO. : IN/CIMFR/TR21/P/1417 Dt. : 13/08/2021
- PESO CERTIFICATE NO. : P538248/1 Dt. : 14/06/2022
- Standard Compliance :
 - IS / IEC 60079-0 : 2011
 - IS / IEC 60079-1 : 2014
 - IS / IEC 60529 : 2001

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



PESO Certified Hooter Cum Flasher

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-1 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 :

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

TECHNICAL SPECIFICATIONS

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

Error indication for OPEN / OVER range of slave devices
 BLEB to indicate Read error/Communication cable break / improper setting communication parameters with slave devices.

Relay

- 3 Nos. SPDT Relay of Rating "NO CONTACT: 10A 250VAC/5A 30VDC
 NC CONTACT: 3A 125VAC/3A 30VDC"
- 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. push button on front side with password protection for Flameproof Model.
 Logic : LOW-LOW, HIGH-HIGH, LOW-HIGH User Settable

Flameproof Housing

Protection Class : IP-66
 Cabinet Material : Cast Aluminium alloy, LM-6
 Approval : CIMFR approved for IIA, IIB group, IIC

Certificate Agency	Certificate No.	Certificate Dt.
CIMFR	IN/CIMFR/TR21/P/1417	13/08/2021
PESO	P538248/1	14/06/2022

Cable Entry : Double Compression Cable Gland Ex-proof M20 X 1.5mm (P)

Certificate Agency	Certificate No.	Certificate Dt.
CIMFR	IN/CIMFR/TR21/R/2147	12/10/2021
PESO	P538850/7	16/06/2022

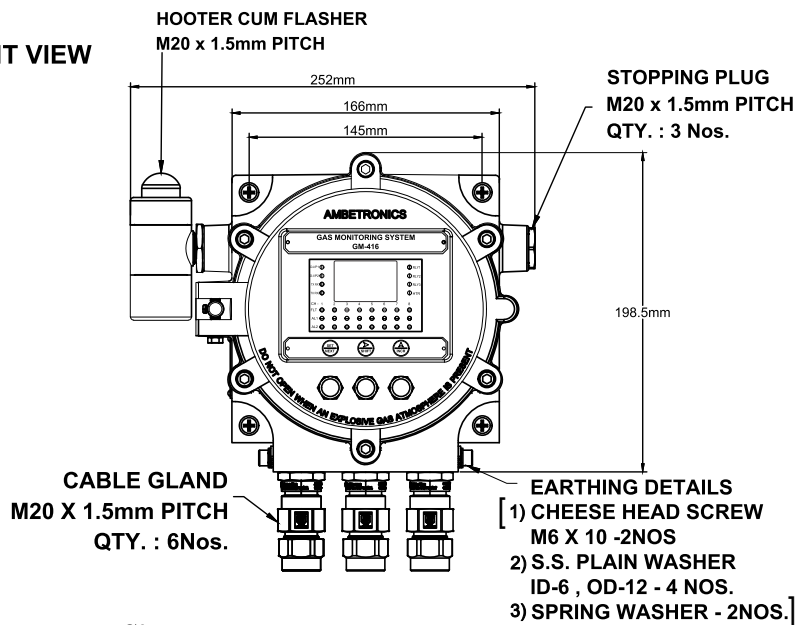
Stopping Plug : (M20 x 1.5P & M25 x 1.5P)

Certificate Agency	Certificate No.	Certificate Dt.
CIMFR	IN/CIMFR/TR21/R/1143	23/07/2021
PESO	P538850/3	16/06/2022

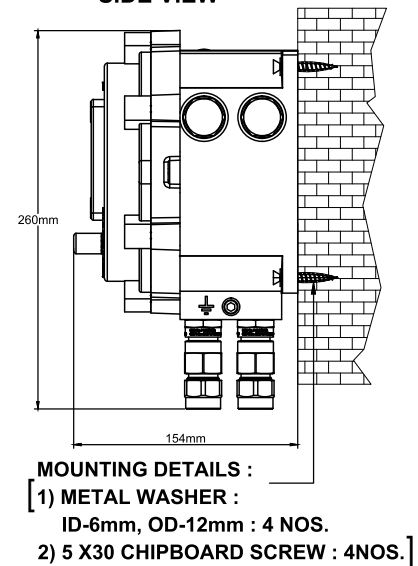
Mounting : Wall Mounting / Stand Mounting / Pipe Mounting
 Dimension : 260 mm (H) with Cable gland x 252 mm (W) with stopping plug & Hooter Cum Flasher x 154 mm (D)
 Weight : Approx. 5.600 kg

FLAMEPROOF ENCLOSURE DIMENSION & MOUNTING DETAILS

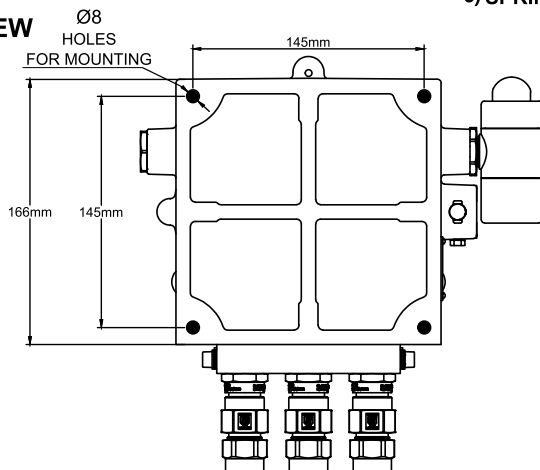
FRONT VIEW



SIDE VIEW



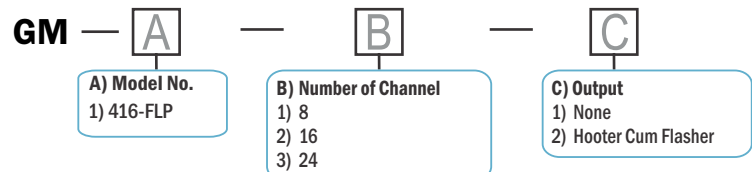
BACK VIEW



NOTE :

- ALL DIMENSION ARE IN mm.
- TOLERANCE : ±2mm.
- SIZE : 260mm(H) X 252mm(W) X 154mm(D)

ORDERING INFORMATION



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

Manufactured by :

AMBETRONICS ENGINEERS PVT. LTD.

17-B, Tarun Industrial Estate, Mogra Pada, New Nagardas Road, Andheri (E.) Mumbai - 400 069, India.

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