

LPG/PNG/CNG Gas Leak Detector/ Transmitter Octa Safe series

GT-4220-WP-(RS-485/4-20mA)



AMBETRONICS™
AN ISO 9001:2015 CERTIFIED COMPANY



ORDER CODE : GT-4220-WP-0-0-Octa Safe

Features

- Provides a fast & reliable response by using Catalytic / Pellistor / Semiconductor technology for detecting leak of LPG/PNG/ CNG/ LNG/ Natural Gas/ Flammable Gas.
- Isolated RS-485 communication port with MODBUS RTU protocol/ 4-20mA output.
- Non-intrusive programming with Magnetic Wand.
- Password protected programming menu.
- Optimised for detection of smallest Gas leaks with optional Integrated Buzzer & Flasher as optional.
- 2 numbers Alarm Relay Contacts configurable for Warm, Alarm & Fault.
- In built Temperature Detection
- Indication for 'Sensor Open', 'Loop Open /Communication Fault Alert.
- Temperature Alert' (Optional).
- 'Test Mode' provided to check the electronics as Alarm LEDs, Relay.

Applications

- Gas Metering Skid
- CNG station
- Fertilizers Plants
- Oil & Gas Industries
- Ambient Monitoring
- Gas Pipeline Project Refineries
- Gas Metering Station
- Gas Refilling station
- BMS
- Commercial Kitchen
- Gas manifold area
- Chemical & Petrochemical Plants
- Automotive Industrial / Paints Shops
- LPG Gas Cylinder Bank
- Sewage Plants
- Burner / Furnace Areas
- Heat Treatment Plants
- Chemical Storage Area
- LPG Bullet Yards
- Chemical Processing Plant
- Offshore Drilling & Processing Platform
- Power & Industrial Plants

MUST FOR HUMAN & INDUSTRIAL SAFETY

TECHNICAL SPECIFICATIONS

General :

Gas Sensor	: Catalytic / Pellistor / Semiconductor
Sensor Holder	: ABS Plastic
Temperature Sensor	: For Ambient temperature measurement (Optional)
Detection Method	: Continuous Diffusion
Range & Resolution	: As specified in table
Display & LEDs	: 4 Digit Seven segment LED Display. 4, L.E.D.'s for Warn (Warning), Alarm, Fault, Communication to indicate status of instrument.
Set Point	: i) Two independent Alarm set points for AL1 & AL2 with LED indication ii) User selectable Hysteresis and Logic options for Alarm. iii) Ambient Temperature detection set point can be set between 0°C to 90°C (Optional)
Setting	: Non-intrusive programming with Magnetic wand without opening enclosure cover

Accuracy :

Catalytic / Pellistor	: ± 2 % full scale
Semiconductor	: ± 10 % of full scale

Performance :

Response time	: Less than 5 seconds
Start-up Time	: Less than 30 seconds

Electrical :

Supply Voltage	: 18 to 36 VDC, Typically 24VDC
Power Consumption	: Less than 2 Watts
Cable	: 1) 4 Core, 1mm ² , Shielded Flexible Industrial Cable for 24 VDC input & RS-485 Output 2) 4 Core, 1mm ² , Shielded Flexible Industrial Cable for Relay Output 2) 3 Core, 1mm ² , Shielded Flexible Industrial Cable for 24 VDC input & 4-20mA Output

Environmental :

Operating Temperature	: -20 to +60°C
Storage Temperature	: -30 to +70°C
Humidity	: Less than 95% Non-Condensing.

Output Signal :

Output 1	: Two SPST NO/C/NC relays contact rating 5A/250VAC, 5A/30VDC
Output 2	: Isolated RS-485 communication with MODBUS RTU protocol.
Output 3	: SS 316 PESO Certified Hooter Cum Flasher 90dB with RED light flashing.

Error Monitoring :

- 1) During Sensor Break / Open the display shows 'Sensor Open/ Over Range' and MODBUS Hex Value/Decimal Value is 0x7FFF /32767.
- 2) Ambient Temperature exceeds > set point, FLT LED blinks and Alarm relay will be activated.

Accessories (Optional) :

- | | |
|-------------------------------------|----------------------------|
| 1) CE certified 24 VDC Power supply | 3) RS-485 to USB converter |
| 2) Canopy & Mounting stand | 4) Hooter cum Flasher |

Common Deliverable

- | | |
|---|-------------------------------|
| 1) Test Calibration Certificate | 4) Standard Mounting Hardware |
| 2) Reference Calibration Gas Certificate | 5) Splash Guard |
| 3) 'Operational / Instrument' User Manual | 6) Magnetic Wand |

Weatherproof Housing

Protection class	: IP 65
Enclosure material	: Polycarbonate, ABS Grey (RAL7035)
Cable entry	: Polyamide Cable Gland: M12/ M16/ M20
Dimension	: 141 mm(H) with sensor holder X 174 mm(W) with cable gland & Hooter cum Flasher X 70 mm(D)
Mounting	: Wall Mounting/ Stand Mounting
Weight	: Approximately 350 grams.

LIST OF GASES WITH RANGE AND RESOLUTION AND ALARM SET POINT

CATALYTIC / PELLISTOR SENSOR TECHNOLOGY

SR. NO.	GASES	RANGE	UNIT	RES.	AL1	AL2
C21	Methane (CH4)	100	%LEL	1	20%LEL	40%LEL
C21	CNG	100	%LEL	1	20%LEL	40%LEL
C21	LNG	100	%LEL	1	20%LEL	40%LEL
C21	PNG	100	%LEL	1	20%LEL	40%LEL
C21	Natural Gas	100	%LEL	1	20%LEL	40%LEL
C21	Flammable Gas	100	%LEL	1	20%LEL	40%LEL
C18/C21	LPG (C3H8)	100	%LEL	1	20%LEL	40%LEL

SEMICONDUCTOR SENSOR TECHNOLOGY

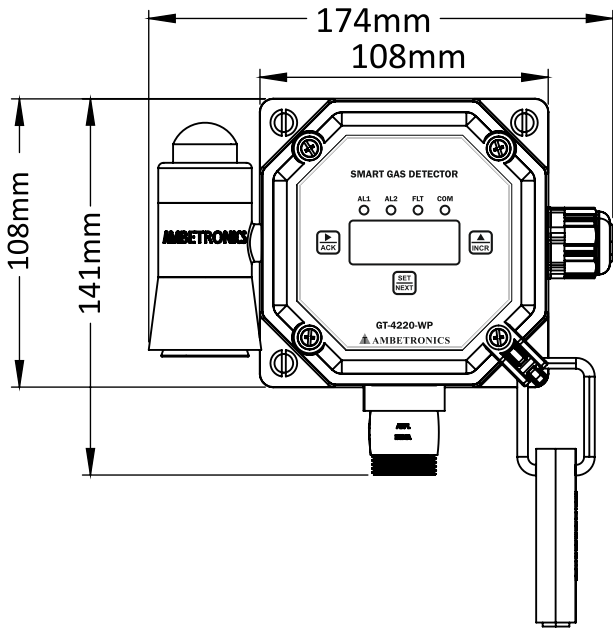
SR. NO.	GASES	RANGE	UNIT	RES.	AL1	AL2
SC 1	Methane (CH4)	9999	PPM	1	1000 PPM	3000 PPM
SC 2	CNG	9999	PPM	1	1000 PPM	3000 PPM
SC 3	LNG	9999	PPM	1	1000 PPM	3000 PPM
SC 4	PNG	9999	PPM	1	1000 PPM	3000 PPM
SC 5	Natural Gas	9999	PPM	1	1000 PPM	3000 PPM
SC 6	Flammable Gas	9999	PPM	1	1000 PPM	3000 PPM
SC 7	LPG (C3H8)	9999	PPM	1	1000 PPM	5000 PPM
SC 8	Methane (CH4)	20	%LEL	1	2%LEL	6%LEL
SC 9	CNG	20	%LEL	1	2%LEL	6%LEL
SC 10	LNG	20	%LEL	1	2%LEL	6%LEL
SC 11	PNG	20	%LEL	1	2%LEL	6%LEL
SC 12	Natural Gas	20	%LEL	1	2%LEL	6%LEL
SC 13	Flammable Gas	20	%LEL	1	2%LEL	6%LEL
SC 14	LPG (C3H8)	50	%LEL	1	5%LEL	23%LEL

NOTE:

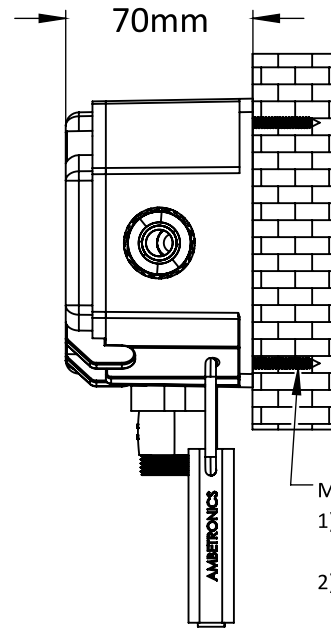
- In above Table, Range of gases start from zero.
- Gases which are not listed, are available on request & for other details contact factory.

ENCLOSURE DIMENSION & MOUNTING DETAILS

FRONT VIEW

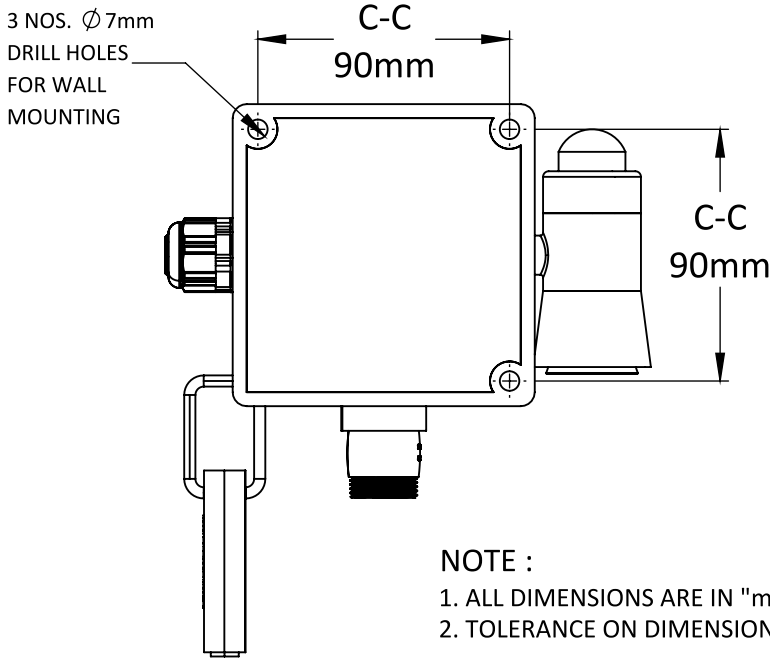


SIDE VIEW



- MOUNTING DETAILS :
- 1) METAL WASHER
ID-6mm, OD-12mm, 3 NOS.
 - 2) 5X30 CHIPBOARD SCREW 3 NOS.

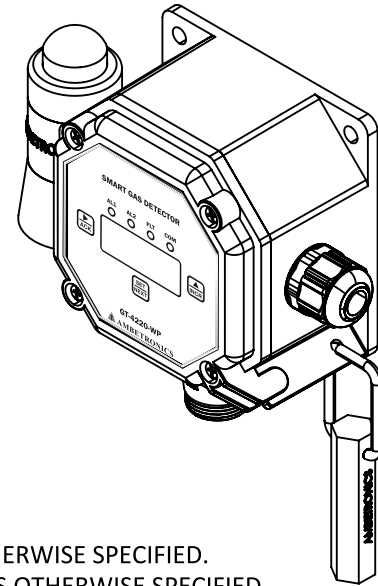
BACK VIEW



NOTE :

1. ALL DIMENSIONS ARE IN "mm", UNLESS OTHERWISE SPECIFIED.
2. TOLERANCE ON DIMENSION ± 5 mm, UNLESS OTHERWISE SPECIFIED.

ISOMETRIC VIEW



ORDERING INFORMATION

1) GT-4220-WP-0-0-Octa Safe

MODEL NO.

OUTPUT
0) 4-20mA
1) RS-485

DEFAULT

ENCLOSURE

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

Manufactured by :



CIMFR



PESO



GeM
CONSTITUTED
e Marketplace



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