

GT-1033-WP

Smart Gas Detector



AMBETRONICS
AN ISO 9001:2015 CERTIFIED COMPANY

PROVISIONAL



Features

- Industrial standard, 4-20mA output with Respect to Gas Concentration
- Loop Test, Assure Proper Operation of the Transmitter without Calibration Gas
- 3 Color LCD backlit RED, GREEN, BLUE
- Easy Programming with Password Protection
- Fast Response, Easy to Read Display
- Easy to Replace Sensor Module; On Filed Plug-N-Play Module
- Reverse Polarity Protection
- No Additional Power Required
- Highly Reliable, Fast, Accurate for Specific Gas Detection
- User Friendly, Simple to Operate & Easy to install
- Excellent Long Term Stability
- Reduced Operating, Maintenance and Installation Cost, One Man Calibration
- Sensor Open/ Over Range Indication
- Inhibit mode for service purpose, current output settable as per the requirement

ORDER CODE : **GT-1033-WP-0-0**

Applications

- Gas Metering Skid
- Oil & Gas Industries
- Refineries
- Stack Monitoring
- Sewage Plants
- Ambient Monitoring
- Control Atmosphere
- Chemical Processing Plant
- Offshore Drilling & Processing Platform
- Coal Mine and Confined Area
- Bullets Yards / Storage Yard
- Gas Metering Station Burner / Furnace Areas
- Gas Cylinder Bank
- Gas Pipeline Projects
- Cold Storage
- Fertilizers Plants
- Chlorination Plant
- Pulp & Paper plants
- Heat Treatment Plants
- Acid Alkalize & Dyes mfg. Plants
- Chemical Storage Area
- Power & industrial Plants
- Chemical & Petrochemical Plants
- Automotive industrial / Plants Shops

TECHNICAL SPECIFICATIONS

General

Sensor	: Electrochemical Sensor / NDIR
Range / Resolution	: As specified in the Table
Detection Method	: Diffusion
Response Time	: Less than 10 sec
Display	: 3 Color LCD backlit RED, GREEN, BLUE
Set Point	: Two Independent set point, with alarm symbol for indication purpose. (There is no relay output)
Settings	: By using Magnetic Wand

Accuracy

Toxic / O ₂	: ±2% of Full Scale Range
NDIR CH ₄	: ±0.2% V/V or %5 of Applied Gas

Electrical

Power Supply & Load Resistance	: Load Driving capacity as follows
	a) 820 Ω at 24VDC to 36VDC
	b) 680 Ω at 22VDC to 36VDC
	c) 560 Ω at 20VDC to 36VDC
	d) 47 Ω at 87VDC to 36VDC

Output Signal

Standard	: 4-20mA Loop current output with configurable range
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Error Monitoring

- 1) During Sensor break / open the display shows 'OPEN' & Loop current will be Upscale / Downscale .
- 2) During Over Range the display shows 'OVER' & Loop current will be Upscale / Downscale .
 - Upscale : 21mA
 - Downscale : 3.7mA
- 3) Inhibit mode current adjustable 3.8mA / 4mA (for Toxic / NDIR) & 3.8mA / 17.4mA (for Oxygen), user programmable.

Environmental

Operating Temp.	: -15°C to +50°C
Storage Temp.	: -10°C to +60°C

Optional accessories

- CE certified 24VDC power supply
- Gas sampling & conditioning system
- Canopy & Mounting stand

Weatherproof Housing

Protection Class	: IP65
Cabinet Material	: Polycarbonate, ABS Grey (RAL7035)
Cable entry	: Polyamide Cable Gland M12, M16, M20
Dimension	: 180mm (H) with Sensor Holder x 128mm (W) x 97mm (D)
Mounting	: Wall Mounting / Stand Mounting / Pipe Mounting
Weight	: Approximately 700 Grms.

MUST FOR HUMAN & INDUSTRIAL SAFETY

GAS WITH RANGE & RESOLUTION

ELECTROCHEMICAL SENSOR TECHNOLOGY

SR.NO	GASES	RANGE	UNIT	RES	ORDER CODE
1	Oxygen (O ₂)	25	%V/V	0.01	SSM-WP-02-EC-08-03
3	Nitrogen (N ₂)	100	%V/V	0.1	SSM-WP-N2-EC-14-03
TOXIC GASES					
1	Ammonia (NH ₃)	100	PPM	1	SSM-WP-NH3-EC-14-01
2	Ammonia (NH ₃)	1000	PPM	1	SSM-WP-NH3-EC-24-01
3	Bromine (Br ₂)	10	PPM	0.1	SSM-WP-BR2-EC-05-01
4	Carbon Monoxide (CO)	1000	PPM	1	SSM-WP-CO-EC-24-01
5	Carbon Monoxide (CO)	2000	PPM	1	SSM-WP-CO-EC-28-01
6	Chlorine (CL ₂)	10	PPM	0.1	SSM-WP-CL2-EC-05-01
7	Ethylene Oxide (ETO)	100	PPM	1	SSM-WP-ETO-EC-14-01
8	Hydrogen (H ₂)	2000	PPM	1	SSM-WP-H2-EC-26-01
9	Hydrogen Bromide (HBr)	100	PPM	1	SSM-WP-HBR-EC-14-01
10	Hydrogen Chloride (HCL)	100	PPM	1	SSM-WP-HCL-EC-14-01
11	Hydrogen Cyanide (HCN)	100	PPM	1	SSM-WP-HCN-EC-14-01
12	Hydrogen Fluoride (HF)	10	PPM	0.1	SSM-WP-HF-EC-05-01

TOXIC GASES

SR.NO	GASES	RANGE	UNIT	RES	ORDER CODE
13	Hydrogen Fluoride (HF)	100	PPM	1	SSM-WP-HF-EC-14-01
14	Hydrogen Sulfide (H ₂ S)	100	PPM	1	SSM-WP-H2S-EC-14-01
15	Ozone (O ₃)	20	PPM	0.1	SSM-WP-O3-EC-06-01
16	Phosphine (PH ₃)	10	PPM	0.1	SSM-WP-PH3-EC-05-01
17	Nitrogen Dioxide (NO ₂)	20	PPM	0.1	SSM-WP-NO2-EC-06-01
18	Nitric Oxide (NO ₂)	250	PPM	1	SSM-WP-NO-EC-17-01
19	Sulfur Dioxide (SO ₂)	50	PPM	0.1	SSM-WP-SO2-EC-11-01
20	Sulfur Dioxide (SO ₂)	2000	PPM	1	SSM-WP-SO2-EC-26-01

NDIR SENSOR TECHNOLOGY

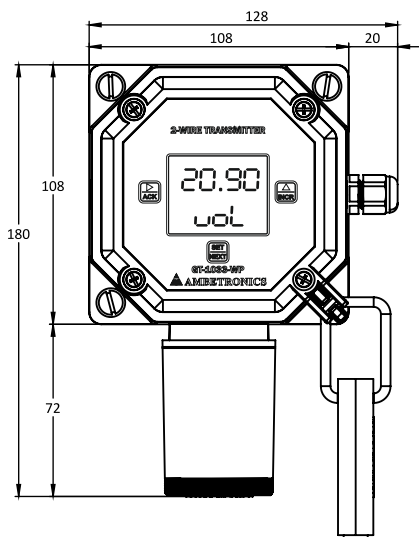
SR.NO	GASES	RANGE	UNIT	RES	ORDER CODE
4	Methane (CH ₄)	100	%LEL	1	SSM-WP-METHANE-IR-14-03

NOTE:

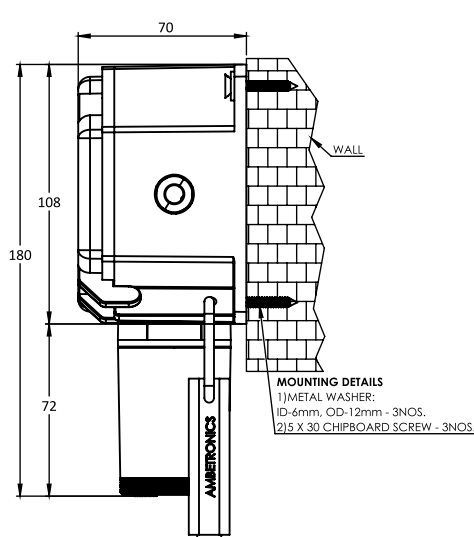
- In above Table, Range of gases start from zero
- Gases which are not listed, are available on request & for other details contact to factory.

DIMENSION & MOUNTING DETAILS

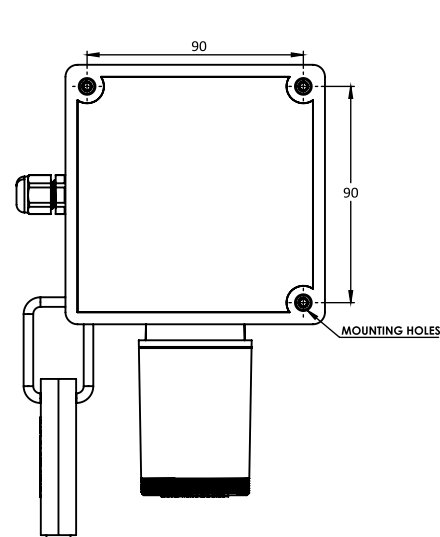
FRONT VIEW



SIDE VIEW

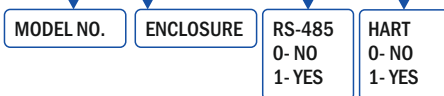


BACK VIEW

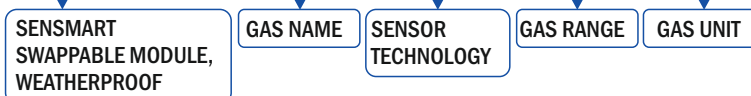


ORDERING INFORMATION

1) GT-1033-WP-0-0



2) SSM-WP-02-EC-08-03



(E.g. Weatherproof SenseSmart Swappable Module;
 Gas Name: OXYGEN (O₂);
 Sensor operating Principle/ Technology: Electrochemical (EC)
 Gas Range & Unit: 25.00 %V/V)

*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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