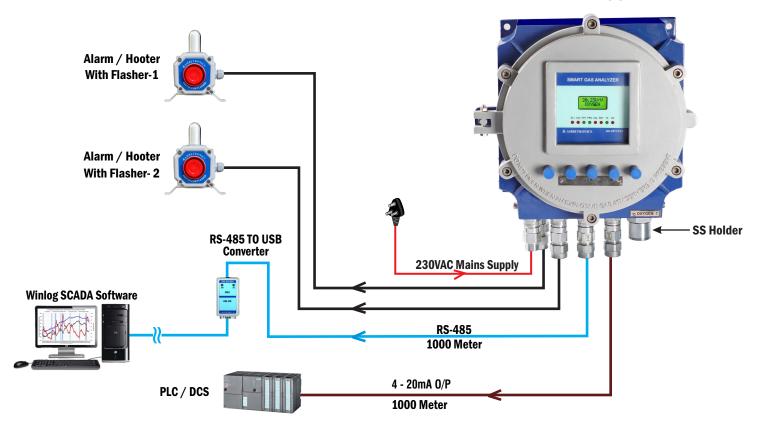
GA-3511-FLP-D

Smart Gas Monitor for Oxygen/Toxic/Combustible Gases



FLAMEPROOF



Features

- Provides a fast and reliable output by using Electro Chemical / Pellister Sensor Technology.
- Optimized for detection of smallest leak of Oxygen, Toxic and Combustible Gases.
- Highly resistant to poisoning and etching.
- Capable of detecting down to PPM, %LEL & %V/V.
- Digital display of Gas Concentration on LCD Display for GA-3511
- Standard 4-20mA signal output with configurable range.
- Easy handling and programming with 3 keys for Flameproof Models.
- Password protected programming with password changing facility.
- Shows peak value of gas concentration with a single key press.
- Optional Alarm relay contacts with two configurable Alarm levels
 & one Relay for fail safe relay.
- Optional RS-485 communication port with MODBUS RTU Protocol.

Applications

- Plant shop
- Refineries
- Welding
- HospitalsPainting
- Wineries
- Willelies
- Cold RoomTank Farms
- Power Plant
- Laboratories
- · Nitrogen Tanks
- Steel Industry
- Clandestine Labs
- Confined Spaces
- Swimming Pools
- Offshore E & P
- Pharmaceutical
- Water Treatment
- Textile Industry
- Animal husbandry
- Beverage Industry

- · Plant construction
- Stack Monitoring
- · Building protection
- Boiler Plant Rooms
- Beverage Dispenser
- Bio Gas Application
- Process MonitoringOil & Gas Industry
- Chemical Industry
- Chemical moustry
- Perimeter MonitoringAutomotive Industries
- Work Place Monitoring
- Sewage Treatment Plants
- Fresh Water Pumping Station
- Land fill/ Bio Gas Generation
- Refrigeration Plants / Monitoring
- nonigoration ranto / monitoring
- Underground Car parking / Tunnels
- Commercial Building Infrastructure
- Planned Equipment Modifications
- · Turnarounds and plant shutdowns
- Hazardous Material storage / Gas Suppliers

TECHNICAL SPECIFICATIONS

General:

: Electrochemical/Catalytic Bead/Pellistor/Siegistor **Detection Principle**

Detection Method : Diffusion method

Gases Detected : Oxygen / Toxic/Combustible Gases (please define)

: 8x2 Alphanumeric LCD Display with Backlit Display

& 8 LEDs to indicate status of instrument

Control Action : i) Two independent alarm set points with Latch &

Non-Latch Facility.

User selectable Hysteresis and Logic option.

iii) Configurable STEL and TWA set points for

Toxic Gases (Optional)

Setting : By using 3 Keys on front panel

Performance :

: ±2% of Full Scale. Accuracy Response Time : Less than 10 seconds.

Electrical:

Supply Voltage : 240VAC / 50 Hz (±10%) **Power Consumption** : Less than 20 Watts.

Cable : 1) For Weatherproof Model :3Wire(1.5 mm²)

Flexible Cable

For Flameproof Model :3 Core copper wire,

Shielded Armored Cable.

Error Monitoring:

- i) During Sensor Break / Open, the Display shows 'SENSOR OPEN' & 4-20mA output goes down to 3.7mA for Combustible gases only.
- ii) During Over Range, the Display shows 'OVER RANGE' & 4-20mA output goes up to 21mA.

Environmental:

Operating Temp.: 0° to +50°C Storage Temp. : -10° to + 60°C

: Less than 95% Non-Condensing. Humidity

Output Signal:

Standard : 4-20mA Current Output with configurable range selection with

470 ohm load driving capacity.

: a) Three SPDT Relay (one for FailSafe & Two for **Optional**

Alarm indication) of rating. 5A/250VAC, 5A/30VDC

b) 0 to 10 VDC

c) RS-485 isolated Port with MODBUS RTU protocol.

Accessories (Optional):

- C∈ certified 24 VDC Power Supply.
- · Canopy & Stand Mounting.
- Gas Calibration Kit (0.5,1,3,10) Litre.
- - Hooter Cum Flasher.
- · Gas Sampling & Conditioning System.
- RS-485 to USB OR RS-232 Converter.
- PC Based SCADA Software, Modem.

Flameproof Housing:

Degree of Protection Class: IP-66

CIMFR CERTIFICATE NO. : CIMFR/TC/P/1923 Dt.: 26/08/2019

PESO CERTIFICATE NO. : P468728/1 Dt.: 21/02/2020

Housing Material : cast Aluminum Lm6 Alloy or cast Iron (C.I.) Enclosure **Cable Entry** : Flameproof, Weatherproof IP66 Double compression

> cable gland (Ex d) Model No.: CG/FLP/2C M20 x 1.5 (P) & M25 x 1.5(P), 1/2" NPT & 3/4" NPT

 CIMFR CERTIFICATE NO. : CIMFR/TC/P/1313 Dt.: 19/09/2018 PESO CERTIFICATE NO. : P431645/2 Dt.:19/11/2019 Dimension : 350 mm (H) x 290 mm (W) x 170 mm (D)

Mounting : Wall Mounting / Stand Mounting / Pipe Mounting

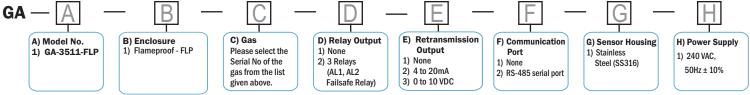
Weight : Approx 6Kg

LIST OF GAS TRANSMITTERS WITH RANGES & RESOLUTION

S.N.	GASES	RANGE	UNIT	RES.	S. N.	GASES	RANGE	UNIT	RES.	S. N.	GASES	RANGE	UNIT	RES.
01	Oxygen (O ₂)	25	%Vol.	0.1	T13	Hydrazine (N2H4)	1	PPM	0.01	CON	IBUSTIBLE GASES			
02	Oxygen (O ₂)	100	%Vol.	0.1	T14	Bromine (Br2)	20	PPM	0.01	C12	Acetone (CH ₃) 2CO	100	%LEL	1
TOXIC GASES			T15	Hydrogen Fluoride (HF)	10	PPM	0.01	C13	Ethanol (C ₂ H ₅ OH)	100	%LEL	1		
T1	Carbon Monoxide (CO)	1000	PPM	1			100	PPM	1	C14	Ethyl Acetate (CH ₃ COOC ₂ H ₅)	100	%LEL	1
		5000	PPM	1	T16	Phosgene/Cobalt (II)				C15	Ethylene (C ₂ H ₄)	100	PPM	1
T2	Sulphur Dioxide (SO ₂)	50	PPM	0.1		Chloride (COCL2)	1	PPM	0.01	C16	Hydrogen (H ₂)	100	%LEL	1
TO	Hudrogen Cultide (ILC)	2000	PPM	1	CON	IBUSTIBLE GASES				C17	Isopropanol (CH ₃ C ₂ H ₄ OH)	100	%LEL	1
Т3	Hydrogen Sulfide (H ₂ S)	100 2000	PPM PPM	1	C1	Methane (CH ₄)	100	% LEL	1	C18	Methanol (CH ₂ OH)	100	%LEL	1
T5	Ammonia (NH3)	100	PPM	1	C2	Butane/n-Butane(C ₄ H ₁₀)	100	%LEL	1	C19	Methyl ethyl ketone (CH ₃ -CO-C ₂ H ₅)	100	%LEL	1
10	Ammonia (Mio)	1000	PPM	1	C3	Propane/n-Propane (C ₃ H ₈)	100	%LEL	1	C20	N-heptane (C_7H_{16})	100	%LEL	1
T6	Hydrogen (H2)	1000	PPM	1	C4	Acetylene (C ₂ H ₂)	100	%LEL	1					1
T7	Chlorine (CL2)	20	PPM	0.01	C5	Hexane/n-Hexane (C ₆ H ₁₄)	100	%LEL	1	C21	N-pentane (C ₅ H ₁₂)	100	%LEL	1
T8	Hydrogen Chloride (HCL)/	20	PPM	0.01	C6	CNG	100	%LEL	1	C22	N-octane (C ₈ H ₁₈)	100	%LEL	1
	Hydrogen Bromide (HBR)	200	PPM	1	C7	LNG	100	%LEL	1	C23	Toluene (C ₆ H ₅ CH ₃)	100	%LEL	1
T9	Nitrogen Dioxide (NO2)	20	PPM	0.01	C8	LPG	100	%LEL	1	C24	Ammonia (NH ₃)	100	%LEL	1
T10	Hydrogen Cyanide (HCN)	100	PPM	1	C9	Natural Gas	100	%LEL	1	C25	Carbon Monoxide (CO)	100	%LEL	1
T11	Ozone (O3)	5	PPM	0.01	C10	Pentane/n-Pentane (C ₅ H ₁₂)	100	%LEL	1	C26	Unleaded Petrol	100	%LEL	1
T12	Phosphine (PH3)	10	PPM	0.01	C11	Flammable (Explosive) Gas	100	%LEL	1	020	omoudou i odoi	130	/ULLL	•
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^{*} Please specify if any other gases and gas range you require which is not in the list Available on Request

ORDERING INFORMATION



^{*} Before placing order please Refer the above ordering information or Contact below address for assistance.

Manufactured by:



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Specifications subject to change without any prior notice

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