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Gas | Flame | Fire Detection Systems

An ISO 9001:2015 Certified Company

# POLLUTION PROTECTION SYSTEMS MUMBAI PVT. LTD.



## IXD 2100-0 for Flammable Gas Hazard Detection

## IXD 2100-1 for Toxic Gas Hazard Detection

## IXD 2100-1 for Oxygen Gas Deficiency/Enrichment Hazard Detection

- Continuous detection of Hydrocarbons, Toxic and Oxygen in hazardous area with flame proof structure
- Superior performance for detecting gas below TLV
- Auto calibration and program setting with magnet bar and LCD display
- 4-20mA DC output signal
- RS 485 communication over Modbus protocol along with HART output
- Non- intrusive calibration without opening the transmitter Enclosure in energized condition
- A 4-20mA signal is provided and optional alarm and fault relays to drive audio visual alarm devices/Auto Cut-offs
- LED status indicator and backlit LCD display ensure status can be seen locally
- Rugged and reliable

### SIMPLE, QUICK INSTALLATION

The PPS IXD 2100 Series Gas Detector is a compact in design and light weight instrument makes an ease for installation. The Bracket assembly/2 pipe mounting assembly can be pre-installed with rain or dust cover and then fixing PPS IXD 2100 Series Gas Detector onto it just by means of SS Nut Bolts. During Commissioning, termination of Signal cable and just Power On, in short duration the system is ready for operation.

### RUGGED HOUSING

The design of the compact durable Aluminium Di-Cast housing of the PPS IXD 2100 Series Gas Detector is dust and water proof with an IP65/66 protection level. Sensor Housing is made of SS316 grade makes it corrosion free when installed in corrosive Gas at mosphers.

### RELAY MODULE

The PPS IXD 2100 Series Gas Detector can be Equipped with a relay module to make it a stand alone device with two gas alarms and one fault relay. The relay module forms a part of transmitter, so there is no additional installation cost or wiring to be done. For general purpose use only.

### ACCESSORIES / REMOTE SENSOR

The remote sensor arrangement can be provided makes it easy to install on the wall using the Sensor Holder / adapter upto the distance of 30 Mtrs (Depending on Sensor used) or onto ducts and pipes (using separate accessories).

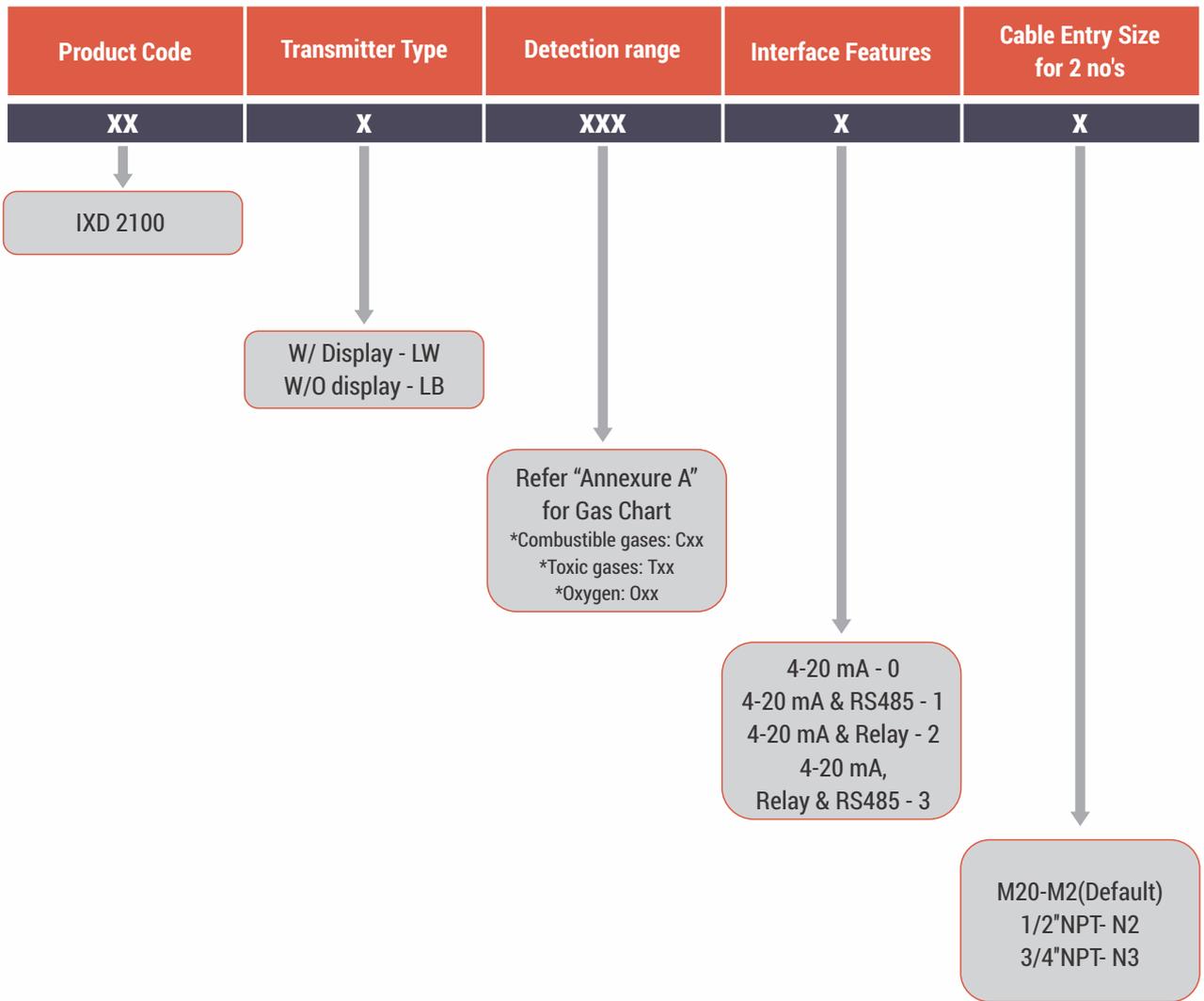


Description	Flammable	Toxic	Oxygen
Model	IXD 2100-0	IXD 2100-1	IXD 2100-1
Measuring Range	0-100% LEL	Refer Gas Chart "Annexure A"	0-25% V/V (Optional PPM Range Available)
Resolution	1% LEL	Refer Gas Chart "Annexure A"	0.1% V/V
Sensor	Catalytic or IR	Electrochemical or PID Or IR	Electrochemical
Accuracy	± 2% FSD	± 2% FSD	± 2% FSD

**Type Explosion proof Flameproof enclosed transmitter ("d")**

Gases	Hazardous gases, Vapors, Oxygen and Toxic Gases		
Display	Backlit 8 x 2 alphanumeric LCD Normal & Alarm Status by LED (green / red)		
Electrical data	Signal output analog	Normal operation 4-20 mA Current Loop @ 700 E resistance	
	Maintenance	Constant 3.4 mA or 4 mA ±1 mA 1 Hz modulation; (adjustable) Fault over range fault above 20mA	
	Signal Output Digital	RS 485 Modbus RTU & HART (optional)	
	Power supply	24 VDC Nominal	
	Power consumption (max.) relay	2.49 watts at 24 V	
	Relay specification (option)	2 alarm relays and 1 fault relay, single-pole two-way contact 5 A @ 230 VAC, 5 A @ 30 VDC, resistance-bound	
	Response Time	Less than 5 Sec	
Electrical data	Temperature	-40 Deg C to +60 Deg C	
	Humidity	5 to 95% RH Non-Condensing	
Housing	Transmitter housing	Copper free Aluminium / Stainless steel SS316	
	Sensor housing	Stainless steel SS316	
	Ingress protection	IP 66	
	Cable entry point	Default M20 (1/2" & 3/4" NPT thread's available)	
	Dimensions (H x W x D)	131 x 145 x 184 mmApx.	
	Weight Apx.	AL :- 4.2 lbs / 1.9 kg / SS :- SS316 :- 5.7 lbs / 2.6 kg	
Technical	Performance Test Certificate	For Flammable Gas Detector as per BS EN/IEC 60079-29 For Toxic Gas Detector as per IEC/BS EN 45544	
	Safety Integrity Level (SIL)	SIL-2 as per IEC-61508	
Approvals*	IECEX / ATEX / PESO / EAC	II 2GD Ex db IIC T6 Gb, IECEX Ex tb IIIC T80°C Db IP66 -40°C ≤ Ta ≤ +60°C	IECEX Certificate No : IECEX ITS 21.0019X ATEX Certificate No : ETL21ATEX0028X
	   		

# ORDERING INFORMATION



## Flammable Gas &amp; Range - "ANNEXURE A"

Sr. No.	Name of Gas		Range	Gas Code Cxx	Sensor Type
1	Methane ( CNG)	CH <sub>4</sub>	0-100%LEL	C01	Catalytic
	Methane ( CNG)	CH <sub>4</sub>	0-100% LEL	C02	IR
2	Methane ( CNG)	CH <sub>4</sub>	0-100% Vol.	C02V	IR
3	Hydrogen	H <sub>2</sub>	0-100%LEL	C03	Catalytic
4	Propane(LPG)	C <sub>3</sub> H <sub>8</sub>	0-100%LEL	C04	Catalytic
	Propane(LPG)	C <sub>3</sub> H <sub>8</sub>	0-100%LEL	C05	IR
5	Propane(LPG)	C <sub>3</sub> H <sub>8</sub>	0-100% Vol.	C05V	IR
6	Acetaldehyde	CH <sub>3</sub> CHO	0-100%LEL	C06	Catalytic
7	Formaldehyde	HCHO	0-100%LEL	C07	Catalytic
8	Acetone	CH <sub>3</sub> COCH <sub>3</sub>	0-100%LEL	C08	Catalytic
9	Acetylene	C <sub>2</sub> H <sub>2</sub>	0-100%LEL	C09	Catalytic
10	N-Butane	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>2</sub> CH <sub>2</sub>	0-100%LEL	C10	Catalytic
11	Iso-Butane	(CH <sub>3</sub> ) <sub>2</sub> CHCH <sub>3</sub>	0-100%LEL	C11	Catalytic
12	Ethane	C <sub>2</sub> H <sub>6</sub>	0-100%LEL	C12	Catalytic
13	Ethanol	CH <sub>3</sub> CH <sub>2</sub> CHO	0-100%LEL	C13	Catalytic
14	Ethylene	C <sub>2</sub> H <sub>4</sub>	0-100%LEL	C14	Catalytic
15	Methanol	CH <sub>3</sub> OH	0-100%LEL	C15	Catalytic
16	N-Propanol	(CH <sub>3</sub> ) <sub>2</sub> CHOH	0-100%LEL	C16	Catalytic
17	Propylene	C <sub>3</sub> H <sub>6</sub>	0-100%LEL	C17	Catalytic
18	Toluene	C <sub>7</sub> H <sub>8</sub>	0-100%LEL	C18	Catalytic
19	Xylene	C <sub>8</sub> H <sub>10</sub>	0-100%LEL	C19	Catalytic
20	Helium	He	0-100% Vol.	C20	TCD

\*Note: If required gas range is not mentioned in the list let us know on email : [sales@ppsmumbai.com](mailto:sales@ppsmumbai.com)

## Toxic Gas &amp; Range - "ANNEXURE A"

Sr. No.	Name of Gas		Range (PPM)	Gas Code Txx	Sensor Type
1	Ammonia	NH3	0-50	T01	Electrochemical
2			0-100	T02	Electrochemical
3			0-1000	T03	Electrochemical
4			0-5000	T04	Electrochemical
5			0-10000	T05	Electrochemical
6	Hydrogen Sulphide	H2S	0-50	T06	Electrochemical
7			0-100	T07	Electrochemical
8	Carbon Monoxide	CO	0-100	T08	Electrochemical
9			0-200	T09	Electrochemical
10			0-500	T10	Electrochemical
11			0-1000	T11	Electrochemical
12			0-10000	T12	Electrochemical
13	Chlorine	CL2	0-10	T13	Electrochemical
14			0-20	T14	Electrochemical
15			0-100	T15	Electrochemical
16	Carbon Dioxide	CO2	0-2000	T16	NDIR
17			0-5% v/v	T17	NDIR
18	Hydrogen	H2	0-500	T18	Electrochemical
19			0-1000	T19	Electrochemical
20			0-2000	T20	Electrochemical
21			0-5000	T21	Electrochemical
22	Arsine	AsH3	0-1	T22	Electrochemical
23	Bromine	Br2	0-20	T23	Electrochemical
24			0-200	T24	Electrochemical
25			0-2000	T25	Electrochemical
26	Hydrogen Chloride	HCL	0-20	T26	Electrochemical
27	Hydrogen Fluoride	HF	0-10	T27	Electrochemical
28	Hydrogen Cynide	HCN	0-30	T28	Electrochemical
29	Ozone	O3	0-5	T29	Electrochemical
30			0-200	T30	Electrochemical
31	Nitrogen dioxide	NO2	0-20	T31	Electrochemical
32	Nitric Oxide	NO	0-25	T32	Electrochemical
33			0-100	T33	Electrochemical
34			0-250	T34	Electrochemical
35	Nitrous Oxide	N2O	0-2000	T35	NDIR
36	Phosgene	COCL2	0-1	T36	Electrochemical
37	Sulphour Dioxide	SO2	0-100	T37	Electrochemical
38			0-200	T38	Electrochemical
39	VOC	VOC	0-20	T39	PID
40			0-50	T40	PID
41			0-200	T41	PID

\*Note: If required gas range is not mentioned in the list let us know on email : [sales@ppsmumbai.com](mailto:sales@ppsmumbai.com)

Oxygen - "ANNEXURE A"

Sr. No.	Name of Gas		Range	Gas Code Oxx	Sensor Type
1	Oxygen	O2	0-50	001	Electrochemical
2			0-100	002	Electrochemical





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Version\_2024

**POLLUTION PROTECTION SYSTEMS MUMBAI PVT. LTD.**  
(CIMFR | PESO | ATEX | IECEX | CE Certified & Approved )  
Gas Monitoring & Flame Detection Systems