



## SP-2104 Plus Toxic Gas Detector

Model: SP-2104 Plus

SP-2104Plus is a fixed, intelligent gas detector that measures different gases depending on the sensor installed. It is housed in an explosion-proof structure and uses an intrinsically safe design for electrochemical (EC) sensor. It operates on 12 to 28VDC for EC, and provides an analog (4-20 mA) signal output. At the same time, LED display, optional relays and RS485 output provide flexible configuration. Based on its powerful intelligent process platform and “smart” sensor technology, it supports multiple gases detection, multiple ranges and resolutions, such as CO、H<sub>2</sub>S、 O<sub>2</sub>、 Cl<sub>2</sub>、 NH<sub>3</sub>、 SO<sub>2</sub>、 HCN、 NO、 NO<sub>2</sub>、 PH<sub>3</sub>、 ClO<sub>2</sub>、 ETO 、 HCl、 HF and so on.



### Key Features:

- Brightness LED display
- Modular design, flexible configuration
- Intelligent process platform
- Intrinsic safe design for toxic gases. Supports multiple gases detection and multiple ranges
- Three wires, support 4-20mA analog output
- RS-485(Support MODBUS) Digital communication (Optional)
- Three level switch signal outputs, normal close normal open optional(Optional)
- Supports zero and full span output current adjustment
- Protection against over-range, wrong wire connection
- Full cable entry ex-proof glands

## Applications:

- Metallurgical
- Chemical, medication
- Environment protection
- Electricity, communications
- Fire protection
- Utilities
- Pulp and paper , printing
- Storage
- Sewage disposal
- Food, brewing
- Scientific research, education, homeland security
- Refinery, petrochemical and natural gas plants

## Ordering Information

Model	Sensor	Range	Resolution	Model	Sensor	Range	Resolution
SP-2104Plus	O2	0~25%vol	0.1%VOL	SP-2104Plus	NO	0~250ppm	0.5ppm
SP-2104Plus	CO	0~500ppm	1ppm	SP-2104Plus	NO2	0~20ppm	0.1ppm
SP-2104Plus	H2S	0~100ppm	0.1ppm	SP-2104Plus	PH3	0~20ppm	0.1ppm
SP-2104Plus	Cl2	0~50ppm	0.1ppm	SP-2104Plus	ClO2	0~1ppm	0.03ppm
SP-2104Plus	NH3	0~100ppm	1ppm	SP-2104Plus	ETO-A	0~100ppm	1ppm
SP-2104Plus	SO2	0~20ppm	0.1ppm	SP-2104Plus	ETO-B	0~10ppm	0.1ppm
SP-2104Plus	HCN	0~50ppm	0.5ppm	SP-2104Plus	ETO-C	0~500ppm	10ppm
SP-2104Plus	*HCl	0~30ppm	0.1ppm	SP-2104Plus	H2	0~1000ppm	1ppm
SP-2104Plus	*HF	0~10ppm	0.5ppm	SP-2104Plus	*F2	0~1ppm	0.01ppm

## Configuration

<b>Standard configuration</b>	Gas Detector / Instruction manual / calibration adapter / Installation accessories
<b>Optional Configurations</b>	Span gas / Audible - visual annunciator / Digital contact / Remote controller / pressure release valve

## Specifications

<b>Detection principle</b>	Electrochemistry
<b>Sensor</b>	Intelligent gas detector
<b>Sampling</b>	Diffusion
<b>Power supply</b>	12-28VDC
<b>Power</b>	80mA@24 VDC
<b>Output</b>	4-20mA output RS485 Modbus and 3-Relay(Optional) @30VDC/5A, NO/NC
<b>Load resistance</b>	600Ω
<b>IP rating</b>	IP66/67
<b>Mechanical interface</b>	3/4" NPTM Option is 3/4" NPT F、 1/2" NPT F/M、 G3/4 F/M
<b>Accessories</b>	2" pipe-holding /wall mounting accessories
<b>Operating temperature</b>	-40°C ~ +70°C (Ultimate value) -40°C ~ +55°C (Typical value)
<b>Operating humidity</b>	0-95% RH (non-condensing)
<b>Operating pressure</b>	86kPa-106kPa
<b>Display</b>	4-7 segments LED display Four LED for function indicators
<b>Dimensions</b>	176mm × 145mm × 105mm (HWD)
<b>Material</b>	Aluminum alloy
<b>Weight</b>	2.0 kg
<b>China Ex</b>	Ex d ia IIC T6 DIPA21 TA,T6