

# Datasheet

## Portable Multi-gas Detector

### P10 Series



#### | Description

The P50 series is a new generation of portable multi-gas detector developed by GDS INSTRUMENTS. It detects gas by natural diffusion or inhalation, and uses a high-performance gas sensor with excellent sensitivity and repeatability. Up to 5 different gases can be detected simultaneously.

P50 series is mainly used to detect a variety of combustible, toxic and other harmful gases in the ambient air.

P10 adopts composite materials with high strength and toughness, and has high waterproof and dustproof performance, providing the product with the highest industrial standard level of protection, protection grade up to IP67.

P50 series is globally certified to be used in various harsh environments such as petrochemical, chemical, metallurgical and environmental protection, and the explosion-proof grade is Ex d ib IIC T4 Gb.

#### | Features

- Up to 5 gases can be detected simultaneously
- Smart sensor design, easy to maintain
- Easy to operate, no training required
- EXd design, applicable for Zone 1 and Zone 2 explosion-proof environments
- Withstand 3 meters' drop
- Visual, audible and vibration alarms
- Continuous working time up to 24 hours (Max version up to 36 hours)



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## Specifications

System Specifications		Sensor Specifications			
		GAS	RANGE	RESOLUTION	RESPONSE TIME
DISPLAY	Dot-matrix LCD display High brightness LED to indicate normal, fault, alarm status	CH <sub>4</sub>	0-100%LEL	0.1%LEL	≤15s
GAS TYPE	Combustible and toxic gases	H <sub>2</sub>	0-100%LEL	0.1%LEL	≤15s
DETECTION PRINCIPLE	Catalytic, electrochemical, Semiconductor, PID, infrared	CO	0-1000ppm	1ppm	≤20s
SENSOR LIFE	3 years(Most gases)	O <sub>2</sub>	0-25%VOL	0.1%vol	≤20s
DETECTION METHOD	Diffusion/Pump	O <sub>3</sub>	0-10ppm	0.01ppm	≤20s
Environmental Specifications		H <sub>2</sub> S	0-100ppm	1ppm	≤30s
TEMPERATURE RANGE	-20~+60°C	H <sub>2</sub>	0-1000ppm	1ppm	≤30s
HUMIDITY RANGE	0~95%RH (non-condensing)	CL <sub>2</sub>	0-20ppm	0.1ppm	≤60s
INGRESS PROTECTION	IP67(passed CNEX test)	NH <sub>3</sub>	0-100ppm	1ppm	≤60s
Mechanical Specifications		SO <sub>2</sub>	0-20ppm	0.1ppm	≤30s
MATERIAL OF HOUSING	Composite	NO	0-250ppm	0.1ppm	≤30s
WEIGHT	295g	NO <sub>2</sub>	0-20ppm	0.1ppm	≤30s
DIMENSIONS	120×73×37mm	CH <sub>2</sub> O	0-50ppm	0.01ppm	≤30s
Electrical Specifications		HCL	0-20ppm	0.5ppm	≤30s
POWER	3.7V rechargeable 4000mAh lithium battery	C <sub>2</sub> H <sub>4</sub> Cl <sub>2</sub>	0-50ppm	1ppm	≤30s
CHARGING VOLTAGE	Um=6V±5%				
WORKING TIME	>200 hours (25°C, electrochemical sensor)				
CHARGING TIME	<6 hours (25°C, with original charger)				
ALARMS	95dB audible, LED visual and vibration				
OPERATING MODE	buttons				

\*For other ranges, please consult your local GDS INSTRUMENTS representative

## Approvals

CNEX Ex d ib IIC T4 Gb

## Product Configuration

P50 Series Portable Gas Detector

Calibration cover

Charger

Manual

External sampling pump (optional)

\*For standard configuration, please refer to the actual product provided by the factory. And for more accessories, please consult your local GDS INSTRUMENTS representative.



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