

# PGas-41-H5 Portable Pump-priming Multiple Gas Detector



## 1. Brief Introduction

PGas-41-H5 portable pump-priming multiple gas detector is suitable for the detection of mixed gas concentrations in various industrial environments and special environments. Adopts imported electrochemical/infrared gas sensor and microcontroller technology, with fast response speed, high accuracy, stability and repeatability, the whole machine performance is in the domestic leading level, all its parameters can be customized by user and easy to operate. Built-in 4000mA high capacity polymer rechargeable battery, long stand-by; Using the 3.5 -inch full view IPS industrial color screen to perfectly show various technical indicators and the gas density, can view the historical data on the screen, with storage, data printing, data export, temperature and humidity testing, and many other functions.

## 2. Main Features:

- Adopt latest ultra-low power 32 bit microprocessor with semiconductor nano technology, 24 bit ADC data acquisition chip, measurement accuracy is the highest level in the industry
- Using 3.5 inch full angle IPS industrial color screen, resolution is 320x480, perfectly display of various technical indicators and gas concentration values.
- ppm、% vol、mg/m<sup>3</sup>、mg/L these four concentration units can be switched freely, and the high and low ranges can be automatically switched.

- Can detect 1-5 different kinds of gases at the same time, any combination of sensors, Support PM2.5 dust particle sensor, temperature and humidity sensor, many other types of sensors.
- With data storage function, can store 100000 groups of data, can view historical data on screen and export data.
- With data printing function, can be printed with micro printer data.
- With temperature and humidity detection function, which can detect the temperature and humidity of gas in the field or pipeline
- Various modes can be adjusted: detection mode, storage mode, printing mode, display mode, and air pump mode.
- The internal strong suction pump can work under the micro negative pressure environment. The reasonable design of the chamber ensures that the sensor is free from pressure interference.
- It has overvoltage protection, overcharge protection, short circuit protection, anti-static interference, and anti-magnetic interference functions.
- All software automatic calibration, sensor up to 6 levels of target calibration function, to ensure the accuracy and linearity of measurement, and has data recovery function.
- Chinese / English operation menu, simple and practical
- With temperature compensation function, instrument dust-proof and waterproof design, equipped with dust filter, can be used in all kinds of bad situations.

### 3. Technical Parameters

Detecting gas:	Support 1-5 sensors, all kinds of gas sensors (imported electrochemistry, infrared sensors and PID are optional).		
Measure range:	According to gas sensor.		
Resolution:	According to gas sensor.		
Dust particles:	Can choose PM2.5 laser dust particle sensor (0.3um、1um、2.5um、10um)		
Temperature and humidity:	Temperature: -40 ~ 120℃, humidity: 0-100%RH		
Detection mode:	Pump suction, built-in strong pump, flow:500-1000mL/min adjustable, can work in a micro negative pressure environment		
Accuracy:	≤±3% (Actual accuracy, higher precision depends on specific sensors)	Liner error:	≤±1%

Response time:	≤20s (T90)	Zero drift:	≤±1% (F.S/year)
Recovery time:	≤20s	Repeatability:	≤±1%
Detection mode:	Real-time detection and timing detection can be set up		
Storage mode:	Real time storage and timed storage can be set up; 100000 groups of data can be stored to view historical data on the screen.		
Print mode:	Optional printer data can be set up: printing cycle, automatic printing, manual printing.		
Ex-mark:	ExdII CT6 (intrinsically safe)	Shell material:	ABS+PC
Protection grade:	IP66	Working temperature:	-30 ~ 60°C
Power supply:	4000Ma rechargeable polymer battery	Working humidity:	≤95%RH, non-condensing
Size & weight:	220*85*55 mm (L×W×H) 0.5 Kg (net weight of instrument)	Working pressure:	-30Kpa ~ 100Kpa
Standard accessories:	Dust filter, 1 meter 4*6mm hose, 1 instrument box, specification, certificate, USB charger, calibration hood.		
Optional accessories:	① A mini printer ② PM2.5 laser dust particle sensor ③ other types of sensors that can be customized ④ Water gas filter		

#### 4. Common detecting gas meter:

Detecting Gas	Range	Resolution	Detecting Gas	Range	Resolution
EX	0-100%LEL	0.1%LEL	N <sub>2</sub>	0-100%vol	0.01%vol

CH <sub>4</sub>	0-100%LEL 0-50000ppm 0-100% Vol	0.1%LEL 1ppm 0.01% Vol	NO	0-100ppm 0-250ppm 0-2000ppm 0-5000ppm	0.01ppm 0.1ppm 1ppm 1ppm
O <sub>2</sub>	0-1000ppm 0-5000ppm 0-10000ppm 0-50000ppm 0-5% Vol 0-30% Vol 0-100% Vol	1ppm 1ppm 1ppm 1ppm 0.01% Vol 0.01% vol 0.01% Vol	NO <sub>2</sub>	0-20ppm 0-100ppm 0-1000ppm 0-5000ppm	0.01ppm 0.01ppm 0.1ppm 1ppm
SO <sub>2</sub>	0-1/10/20/100/500/ 1000/2000/5000/10 000/40000ppm	0.01ppm (0-100ppm) 0.1ppm(0-10 00ppm) 1ppm(0-1000 ppm)	NO <sub>x</sub>	0-100ppm 0-1000ppm 0-5000ppm	0.01ppm 0.1ppm 1ppm
CO	0-100ppm 0-500ppm 0-1000ppm 0-2000ppm 0-40000ppm 0-100% Vol	0.01ppm 0.1ppm 0.1ppm 1ppm 1ppm 0.01% Vol	CL <sub>2</sub>	0-10ppm 0-50ppm 0-200ppm 0-1000ppm 0-5000ppm	0.001ppm 0.01ppm 0.1ppm 1ppm 1ppm
CO <sub>2</sub>	0-2000ppm 0-5000ppm 0-10000ppm 0-50000ppm 0-100000ppm 0-20% Vol 0-50% Vol 0-100% Vol	1ppm 1ppm 1ppm 1ppm 1ppm 0.01% Vol 0.01% Vol 0.01% Vol	NH <sub>3</sub>	0-100ppm 0-200ppm 0-1000ppm 0-5000ppm 0-10000ppm 0-50000ppm	0.01ppm 0.1ppm 0.1ppm 1ppm 1ppm 1ppm
CH <sub>2</sub> O	0-10ppm 0-20ppm 0-50ppm 0-500ppm	0.01ppm 0.01ppm 0.01ppm 0.1ppm	H <sub>2</sub>	0-1000ppm 0-5000ppm 0-40000ppm 0-10% Vol 0-100% Vol	0.1ppm 1ppm 1ppm 0.1% Vol 0.1% Vol

O <sub>3</sub>	0-1ppm	0.001ppm	HCN	0-30ppm 0-100ppm	0.01ppm 0.01ppm
	0-5ppm	0.01ppm			
	0-50ppm	0.01ppm			
	0-100ppm	0.01ppm			
	0-200ppm	0.1ppm			
	0-1000ppm	0.1ppm			
	0-5000ppm	1ppm			
	0-30000ppm	1ppm			
H <sub>2</sub> S	0-10ppm	0.001ppm	HCL	0-20ppm 0-200ppm 0-1000ppm 0-3000ppm	0.01ppm 0.1ppm 0.1ppm 1ppm
	0-50ppm	0.01ppm			
	0-100ppm	0.01ppm			
	0-200ppm	0.1ppm			
	0-1000ppm	0.1ppm			
	0-2000ppm	1ppm			
	0-5000 ppm	1ppm			
	0-10000ppm	1ppm			
CLO <sub>2</sub>	0-1ppm	0.001ppm	PH <sub>3</sub>	0-5 ppm 0-20 ppm 0-2000 ppm 0-4000 ppm	0.001ppm 0.01ppm 1ppm 1ppm
	0-50ppm	0.01ppm			
	0-100ppm	0.01ppm			
0-100ppm	0.01ppm				
ETO	0-100ppm	0.01ppm	C <sub>3</sub> H <sub>3</sub> N	0-50ppm 0-100ppm 0-1000ppm	0.01ppm 0.01ppm 0.1ppm
	0-1000ppm	0.1ppm			
	0-30000ppm	1ppm			
COCL <sub>2</sub>	0-1ppm	0.001ppm	CH <sub>2</sub> O <sub>2</sub>	0-50ppm	0.01ppm
SiH <sub>4</sub>	0-50ppm	0.01ppm	CH <sub>3</sub> HS	0-100ppm	0.01ppm
F <sub>2</sub>	0-1ppm	0.001ppm	I <sub>2</sub>	0-50ppm	0.01ppm
	0-10ppm	0.01ppm			
	0-100ppm	0.1ppm			
HF	0-10ppm	0.01ppm	C <sub>3</sub> H <sub>8</sub>	0-20000ppm 0-100% Vol	1ppm 0.01% Vol
	0-50ppm	0.01ppm			
HBr	0-50ppm	0.01ppm	CS <sub>2</sub>	0-50ppm	0.01ppm
B <sub>2</sub> H <sub>6</sub>	0-10ppm	0.001ppm	C <sub>4</sub> H <sub>10</sub>	0-20000ppm	1ppm
AsH <sub>3</sub>	0-1ppm	0.001ppm	C <sub>5</sub> H <sub>12</sub>	0-20000ppm	1ppm
	0-10ppm	0.01ppm			
GeH <sub>4</sub>	0-2ppm	0.001ppm	C <sub>3</sub> H <sub>6</sub>	0-20000ppm	1ppm
	0-20ppm	0.01ppm			
N <sub>2</sub> H <sub>4</sub>	0-1ppm	0.001ppm	C <sub>6</sub> H <sub>14</sub>	0-10000ppm	1ppm
	0-300ppm	0.1ppm			

TNT	0-50mg/m <sup>3</sup>	0.01mg/m <sup>3</sup>	C <sub>2</sub> H <sub>6</sub>	0-30000ppm	1ppm
N <sub>2</sub> H <sub>4</sub>	0-10ppm 0-50ppm	0.001ppm 0.01ppm	SF <sub>6</sub>	0-1000ppm	1ppm
SO <sub>2</sub> F <sub>2</sub>	0-1000ppm	0.1ppm	VOC	0-10ppm 0-50ppm 0-100ppm	0.01ppm 0.01ppm 0.1ppm
			C <sub>6</sub> H <sub>6</sub>	0-1000ppm 0-2000ppm 0-6000ppm	0.1ppm 1ppm 1ppm
C <sub>2</sub> H <sub>2</sub>	0-100%LEL 0-100ppm 0-1000ppm 0-10ppm	0.1%LEL 0.01ppm 0.1ppm 0.01ppm	C <sub>2</sub> H <sub>3</sub> CL	0-100ppm 0-1000ppm	0.01ppm 0.1ppm
C <sub>2</sub> H <sub>4</sub>	0-10ppm 0-50ppm 0-100ppm 0-500ppm 0-1000ppm 0-2000ppm 0-5000ppm 0-10000ppm 0-30000ppm	0.01ppm 0.01ppm 0.01ppm 0.1ppm 0.1ppm 1ppm 1ppm 1ppm 1ppm	C <sub>2</sub> HCL <sub>3</sub>	0-10ppm/0-50ppm/0-1000ppm 0-2000ppm/0-6000ppm	0.01ppm 0.01ppm 0.1ppm 1ppm
C <sub>2</sub> H <sub>4</sub> O	0-10ppm 0-100ppm	0.01ppm 0.01ppm	C <sub>2</sub> CL <sub>4</sub>	0-200ppm	0.1ppm
C <sub>2</sub> H <sub>6</sub> O	0-100%LEL 0-100ppm 0-2000ppm 0-10000ppm 0-50000ppm	0.1%LEL 0.01ppm 1ppm 1ppm 1ppm	CH <sub>3</sub> Br	0-25000ppm	1ppm
CH <sub>4</sub> O	0-100%LEL 0-100ppm 0-2000ppm 0-10000ppm 0-50000ppm	0.1%LEL 0.01ppm 1ppm 1ppm 1ppm	Ar	0-100% vol	0.01% vol
(Not listed in the form please call us)					