



## For High Concentration Gas Measurement Portable Gas Detector

**MODEL NP-1000**

*ATEX intrinsic safe design  
Explosion proof: Exia II CT4  
Ingress protection rating: IP 67*



### Base gas is selectable

Base gas is selectable from 3 gases (Air, N<sub>2</sub> and CO<sub>2</sub>).

### Target gas is selectable

Direct reading is selectable from 5 gases. Only 1 gas (CH<sub>4</sub>) is required for calibration.

### Pump booster function

Higher pump rate gives faster sampling and long distance suction.

### Auto range switching

Automatically switch over from "Low-range" to "High-range" and "High-range" to "Low-range".

### Filters (optional) can be used with standard gas sampling probe

H<sub>2</sub>S removal filter, silicone removal filter can be installed in standard gas sampling probe. Hydrogen sulfide or silicone that would damage sensor in NP-1000 can be removed by these filters.






## Specifications






Model	NP-1000
Gas to be detected	CH4 (C3H8, i-C4H10, He, Ar) / H2
Detection principle	Thermal conductivity
Measurement range	0 - 100 vol%
Alarm type	Gas Alarm: ON/OFF setting available (default: OFF), arbitrary alarm setpoint setting available, non-latching (auto-reset) Fault alarm: Flow rate low, poor sensor connection, battery voltage low, circuit abnormality, and calibration range abnormality
Alarm operation	Gas Alarm: Continuous buzzer sound, blinking of red lamp and gas concentration display (with alarm set to ON) Fault alarm: Intermittent buzzer sound, blinking of red lamp, fault detail display
Accuracy of the reading	±5 vol% (under the same conditions)
Response time	90% response: Within 30 seconds
Detection method	Pump suction type with a flow rate of 0.3 L/min or more (pump L mode)
Display	LCD seven-segment numeric display, bar meter display (50 divisions) and status information display Seven-segment digital display: 0 - 100 vol% Digital bar meter display: Auto range switching L range: 0 - 10.0 vol% / H range: 0 - 100 vol%
Power supply	AA alkaline battery x 4
Continuous operating time	About 30 hours (new batteries, without alarms or lighting, at 25°C)
Operating environment	Operating temperature range: -20 - +50°C Operating humidity range: 95%RH or less (non-condensing) Storage temperature range: -25 - +60°C Storage humidity range: 95%RH or less (non-condensing)
External dimensions	80.1 (W) x 124 (H) x 36 (D) mm (projection portions excluded)
Weight	Approx. 260 g (without batteries)
Drip-proof and dust-proof performances	Equivalent to IP-67
Explosion-proof performance	Intrinsically safe explosion-proof structure ExiaIICT4
Certification, etc.	Explosion-proof certification: IECEx, ATEX, TIIS Others: CE marking
Functions	LCD backlight, data logger, log data display, peak display, switching pump performance between strong and weak, changing a reading target gas, balance gas selection

\* To meet the explosion-proof performance, use the batteries specified in the certification of explosion-proof.

## Accessories

• 4 AA alkaline batteries 	• Hand strap 
• Gas sampling hose (1 m) and gas sampling probe 	

## Optional parts

• 30m hose 	• Dedicated leather case 	• Filter 
• 2L gas sampling bag 	• Data logger management program 	

## Gas list

No.	Gas	Symbol
1	Methane	CH4
2	Propane	C3H8
3	Isobutane	i-C4H10
4	Argon	Ar
5	Helium	He
※	Hydrogen	H2

※ There is a NP-1000 for H2 detection only. If would like to detect H2 gas, order the H2 version. H2 version cannot convert reading to other gases.

## Base gas

No.	Gas	Symbol
1	Air	Air
2	Nitrogen	N2
3	Carbon dioxide	CO2