

**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, N2 and CO2).

## Target gas is selectable

Direct reading is selectable from 5 gases. Only 1 gas (CH4) 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

H2S 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 a kaline 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 ExialICT4	
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	

### Gas list

3
10

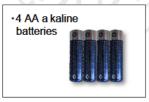
※ There is a NP-1000 for H2 detection only. If would like to detect H2 gas, order the H2 version. H2 version cannot convert reading to other gases.

## Base gas

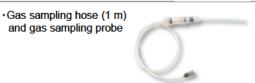
No.	Gas	Symbol
1	Air	Air
2	Nitrogen	N2
3	Carbon dioxide	CO2

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

#### **Accessories**







#### **Optional parts**









•2L gas sampling bag •Data logger management program



#### ★ Distributed by:

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