

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	CH <sub>4</sub> (C <sub>3</sub> H <sub>8</sub> , i-C <sub>4</sub> H <sub>10</sub> , He, Ar) / H <sub>2</sub>
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 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

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

## Gas list

No.	Gas	Symbol
1	Methane	CH <sub>4</sub>
2	Propane	C <sub>3</sub> H <sub>8</sub>
3	Isobutane	i-C <sub>4</sub> H <sub>10</sub>
4	Argon	Ar
5	Helium	He
※	Hydrogen	H <sub>2</sub>

※ There is a NP-1000 for H<sub>2</sub> detection only. If would like to detect H<sub>2</sub> gas, order the H<sub>2</sub> version. H<sub>2</sub> version cannot convert reading to other gases.

## Base gas

No.	Gas	Symbol
1	Air	Air
2	Nitrogen	N <sub>2</sub>
3	Carbon dioxide	CO <sub>2</sub>

## 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



# RIKEN KEIKI Co., Ltd.

2-7-6 Azusawa, Itabashi-ku, Tokyo 174-8744, Japan

Phone : +81-3-3966-1113

Telefax : +81-3-3558-9110

E-mail : [intdept@rikenkeiki.co.jp](mailto:intdept@rikenkeiki.co.jp)

Web site : <http://www.rikenkeiki.co.jp>

★ Distributed by :



# RIKEN VIET

GAS DETECTOR TECHNOLOGY CO., LTD

ISO/IEC 17025:2017 (VLAC 1.0271)

