

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	CH ₄ (C ₃ H ₈ , i-C ₄ H ₁₀ , He, Ar) / H ₂
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 ExiallCT4
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 ₄
2	Propane	C ₃ H ₈
3	Isobutane	i-C ₄ H ₁₀
4	Argon	Ar
5	Helium	He
※	Hydrogen	H ₂

※ 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	N ₂
3	Carbon dioxide	CO ₂

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

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

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