

Combustible gases are detectable at ppm range

# Portable combustible gas detector

Model NC-1000

Target gas  
Select function

(Manufactured in Japan)

Methane, Iso-Butane, Hydrogen, Toluene, Xylene, Alcohol etc. programed 25 different target gases are selectable for direct readout



## ▪ Target gas is selectable

Direct reading is selectable from a list of 25 gases.  
Calibration to only 1 gas (CH<sub>4</sub>) is needed.

## ▪ Pump booster function

Pump speed selectable from 0.35L/min to 0.6L/min.  
Gas can be sampled faster or longer distance with higher pump rate.

## ▪ Intrinsically safe

Safety rating Exia II CT4 allows users to detect a gas at Zone 0 hazardous area where explosion hazards always exists.

## ▪ Ingress proof rating IP67

Water proof, Dust proof construction for outdoor use meets IP67 rating.

## ▪ 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 NC-1000 can be removed by these filters.

## Specification

Model	NC-1000
Gas detected	Combustible gas (CH4, HC etc. Refer to the gas list)
Sensor principle	New ceramic
Detection range	0-10000ppm
Alarm types	Gas alarm: Latching, 1 <sup>st</sup> and 2 <sup>nd</sup> alarm Trouble Low flow, sensor disconnection, low battery voltage, Circuit alarm: abnormality, detection range abnormality
Alarm methods	Gas alarm: Continuous buzzer, flashing lights, gas concentration reading blinks Trouble alarm: Intermittent buzzer, flashing lights, trouble condition is displayed
Preset alarms	1st: 250ppm, 2nd: 500ppm
Indication accuracy	Low range: Full scale +/- 10% (at same condition) High range: Full scale +/- 5% (at same condition)
Response time	Within 30 seconds (T90)
Sampling method	Sample-draw, Flow rate > 0.3L/min (Approx. 0.6L/min for pump boosting mode)
Indication precision	Digital LCD (7 segments) + Bar meter (50 segments) + Status information Digital numeral 7 segments indication: 0 - 10000ppm Digital bar meter indication: Auto range 0~1000ppm (Low range) 0~10000ppm (High range)
Power source	AA alkaline battery, 4pcs
Continuous operation	CH4 version: Approx. 15 hours / HC version: Approx. 20 hours (New battery, no alarm and no light, at 25°C, pump Low mode)
Operating temp. & humidity	Operating temperature -20~50°C, humidity 0 - 95%RH (non condensing) Storage temperature -25~60°C, humidity 0 - 95%RH (non condensing)
Dimension	80.1(W)*124(H)*36(D)mm (3.15(W)*4.88(H)*1.42(D) inches)
Weight	Approx. 260g (9.2 oz.) (exclude alkaline battery)
Water dust proof	IP 67
Safety design	Intrinsically safety ExiallCT4
Approvals	Ex-proof: IECEx, ATEX Other: CE marking
Function	LCD backlight, data logger, log data indication, peak indication pump boosting, gas select

## Target gases

Sensitivity curve for 25 gases is originally loaded in NC-1000.  
Target gas can be switched by button operation.

No.	Gas list	Name indicated on LCD	Lower explosion limit LEL
1	Methane	CH4	5.0vol%
2	Isobutane	i-C4H10 (HC)	1.8vol%
3	Hydrogen	H2	4.0vol%
4	Methanol	CH3OH	5.5vol%
5	Acetylene	C2H2	1.5vol%
6	Ethylene	C2H4	2.7vol%
7	Ethane	C2H6	3.0vol%
8	Ethanol	C2H5OH	3.3vol%
9	Propylene	C3H6	2.0vol%
10	Acetone	C3H6O	2.15vol%
11	Propane	C3H8	2.0vol%
12	Butadiene	C4H6	1.1vol%
13	Cyclopentane	C5H10	1.4vol%
14	Benzene	C6H6	1.2vol%
15	n-Hexane	n-C6H14	1.2vol%
16	Toluene	C7H8	1.2vol%
17	Heptane	n-C7H16	1.1vol%
18	Xylene	C8H10	1.0vol%
19	Ethyl acetate	EtAc	2.1vol%
20	IPA	IPA	2.0vol%
21	MEK	MEK	1.8vol%
22	Methyl methacrylate	MAA	1.7vol%
23	Dimethylether	DME	3.0vol%
24	Methyl isobutyl ketone	MIBK	1.2vol%
25	Tetrahydrofuran	THF	2.0vol%

Note 1) Indication accuracy, response time etc. are confirmed with calibration gas.  
Note 2) Contact Riken Keiki if NC-1000 is required to be calibrated with other than CH4, i-C4H10.  
Note 3) Gas selection is not available when NC-1000 is calibrated with other than CH4, i-C4H10.

## Standard accessory



Hand strap

Alkaline battery

Sampling probe  
(with 0.75m sampling tube)

## Optional accessory



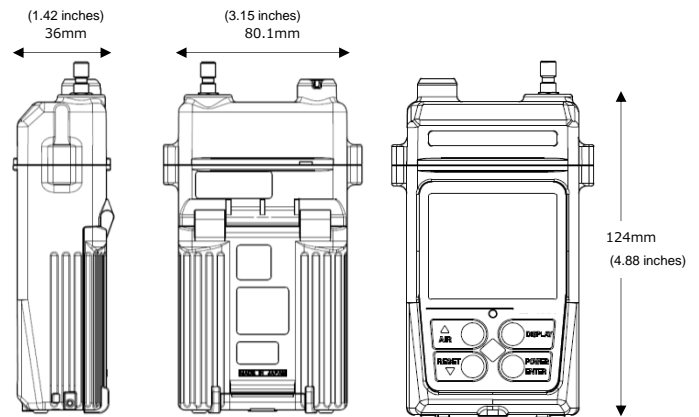
Carrying case

Protection film

Cartridge filter  
· Silicone removal  
· H2S removal

Gas sampling tube  
(5/10/20/30m)

## Outer dimension



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