



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 (CH₄) 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

H₂S 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 (CH ₄ , HC etc. Refer to the gas list)
Sensor principle	New ceramic
Detection range	0-10000ppm
Alarm types	Gas alarm: Latching, 1 st and 2 nd 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	CH ₄ 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 ExialCT4
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	CH ₄	5.0vol%
2	Isobutane	i-C ₄ H ₁₀ (HC)	1.8vol%
3	Hydrogen	H ₂	4.0vol%
4	Methanol	CH ₃ OH	5.5vol%
5	Acetylene	C ₂ H ₂	1.5vol%
6	Ethylene	C ₂ H ₄	2.7vol%
7	Ethane	C ₂ H ₆	3.0vol%
8	Ethanol	C ₂ H ₅ OH	3.3vol%
9	Propylene	C ₃ H ₆	2.0vol%
10	Acetone	C ₃ H ₆ O	2.15vol%
11	Propane	C ₃ H ₈	2.0vol%
12	Butadiene	C ₄ H ₆	1.1vol%
13	Cyclopentane	C ₅ H ₁₀	1.4vol%
14	Benzene	C ₆ H ₆	1.2vol%
15	n -Hexane	n -C ₆ H ₁₄	1.2vol%
16	Toluene	C ₇ H ₈	1.2vol%
17	Heptane	n -C ₇ H ₁₆	1.1vol%
18	Xylene	C ₈ H ₁₀	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



Optional accessory



Outer dimension

