

25 target gas is selectable (Direct reading available)

Portable combustible gas detector

Model GP-1000

(Manufactured in Japan)

Target gas
Select function

Methane, Iso-Butane, Hydrogen, BTX (Benzene, Toluene, Xylene),
Alcohol etc. Total 25 target gases can be detected
(direct reading available) by GP-1000 !!



▪ Target gas is selectable

Direct reading for 25 target gases is available.
This allows users to detect various
combustible gases with just 1 unit GP-1000.

▪ Pump booster function

Pump boosting (0.3ml/min⇒0.6ml/min) is available.
Gas can be sampled from a long distance.

▪ Intrinsically safe

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

※ English version of
panel sheet will be
standard one

▪ Ingress proof rating IP67

IP67 is sufficient level of water and dust proof construction for outdoor use.

▪ 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 GP-1000 can be removed by these filters.

Specification

Model	GP-1000
Gas detected	Combustible gas (CH4, HC etc. Refer to the gas list)
Sensor principle	Catalytic combustion
Detection range	0-100%LEL
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:10%LEL 2nd:50%LEL
Indication accuracy	Full scale +/- 5% (at same condition)
Response time	Within 30 seconds (T90)
Alarm delay time	Within 30 seconds
Sampling method	Sample-draw, Flow rate > 0.3L/min (Approx. 0.6L/min for pump boosting mode)
Indication precision	Digital LCD with 7 segments + Bar meter (50 partitioning) + Status information Digital numeral 7 segments indication: 0 - 100%LEL Digital bar meter indication: Auto range (0 - 10%LEL / 0 - 100%LEL) 0~10 %LEL (L range) 0~100 %LEL (H range)
Power source	AA alkaline battery, 4pcs
Continuous operation	More than 20 hour (new battery, no alarm and no indication 25°C)
Operating temp. & humidity	Operating temperature -20~50°C, humidity 0 - 95%RH (no condensing) Storage temperature -25~60°C, humidity 0 - 95%RH (no condensing)
Dimension	80.1(W)*124(H)*36(D)mm
Weight	Approx. 260g (exclude alkaline battery)
Water dust proof	IP 67
Safety design	Intrinsically safety ExialICT4
Approvals	Ex-proof: IECEx, ATEX, TIIS Other: CE marking
Function	LCD backlight, data log, log data indication, peel indication Pump boosting, gas select

Target gases

Sensitivity curve for 25 gases is originally loaded in GP-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	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) Alarm accuracy, response time etc. are confirmed with calibration gas.
Note 2) Contact Riken Keiki if GP-1000 is required to be calibrated with other than CH4, i-C4H10, H2.
Note 3) Gas selection is not available when GP-1000 is calibrated with other than CH4, i-C4H10.

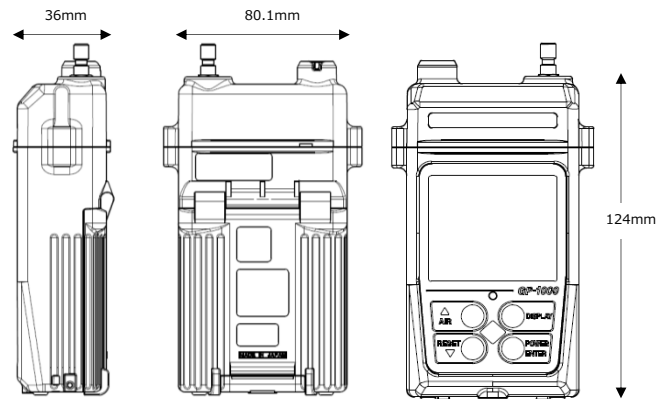
Standard accessory



Optional accessory



Outer dimension



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