



For Semiconductor/LED/Solar Cell plants,
and Gas/Petro Chemical/Chemical plants.

PORTABLE TOXIC GAS MONITOR

Model SC-8000



◆ Application

- Semiconductor/LED/Solar Cell plants
- Petro Chemical/Chemical plants
- Refineries
- Gas plant/Gas supplier services
- Chemical tanker
- Confined space
- Utilities
- Monitoring toxic gas in hazardous zone
- Leak check at maintenance work

◆ Features

- Real time detection with ppm range
- Large digital and bar graph display with back light
- Loud alarm buzzer with 95dB
- 2 steps adjustable alarm
- Easy and simple operation
- Compact size and light weight
- ATEX Intrinsic safe design Exia IIC T4
- Water and dust resistant IP67
- Ergonomic design with waist strap for hands free operation
- Datalogging standard



ISO 9001-95OR-007
ISO 14001-97ER-005
TOKYO PLANT · OHSAGAWA MANUFACTURING
DIVISION · HAKODATE FACTORY

RIKEN KEIKI

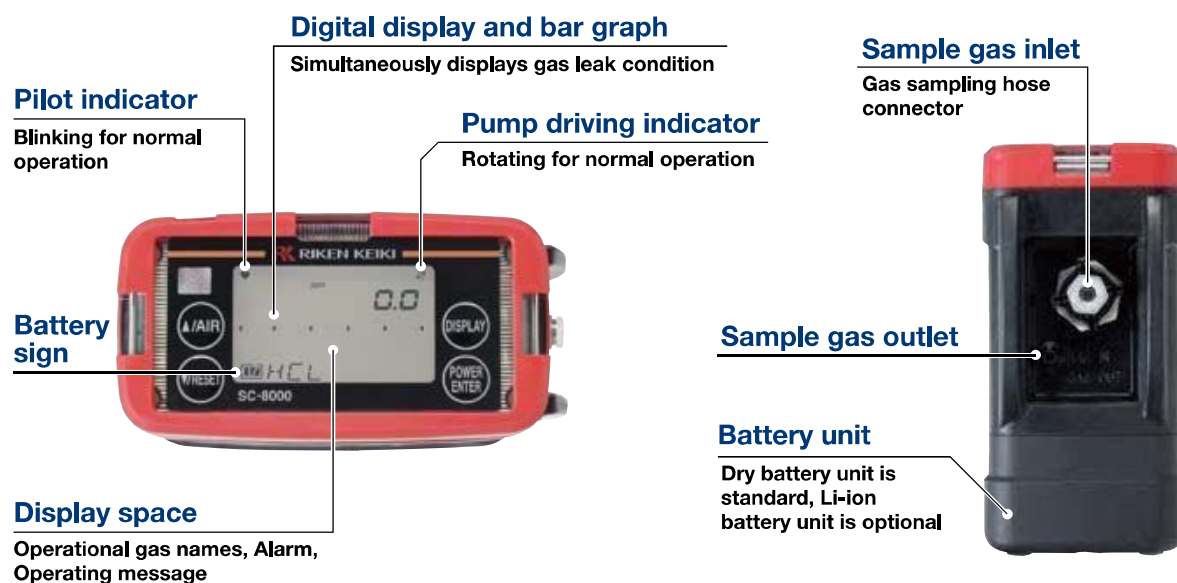
COMPONENT DESIGNATIONS

The SC-8000 sets the new industry standard for rugged, reliable portable toxic gas detection. It's compact, light weight, tough, water proof and intrinsic safe design utilized features based on years of gas detection experience, to assure that the instrument will operated properly to check gas leak and protect workers and also, property in toxic gas detection applications.



Top view

Side view



◆ Specifications

Model	SC-8000
Target gas Detection range Alarm point	Please refer to the table on the next page.
Detection principle	Electrochemical
Types of alarm	Gas alarm : Latching, 2 alarms (STEL, TWA : optional) Failure alarm : Flow failure, Sensor failure, Battery failure, Circuit failure, Calibration failure, Setting current failure
Display of alarm	Lamp : LED's flash (high definishion LED) Buzzer : (Gas alarm) Alternating sound high and low pitch, (Failrure alarm) Continuous sound Display : (Gas alarm) Gas concentration on the dispalay flashes. (Failrure alarm) Alarm message on the display flashes.
Alarm sound	More than 95dB (A) at 30cm
Sampling method	Sample draw approx. 0.5L/min
Display	Digital LCD with auto backlight Digital display (7 segments) + digital bargraph (50 segments)
Power souce	AA Alkaline battery (3 pcs) : Standard Lithium-ion battery (3 hours for a full charge) : Option
Continuous operation	AA Alkaline battery : more than 18 hours Lithium-ion battery : more than 25 hours
Operating temp & humidity	Operating temp : -10~40℃, Humidity below 20~88%RH (without condensing)
Dimensions & Weight	Dimension : 154×81×154mm, Weight : approx 1.0 kg (with BUD-8000)
Ingress proof rating	Equivalent to IP67
Explosion proof	Intrinsically safe : Exia II C T4
Approvals	IECEX (No.DEK 11.0019), ATEX (No.DEKRA 11ATEX0047), TIIS (Pending) CE mark
Additional features	Self diagnosis system Zero/Span adjustment (Demand zero/Auto zero selectable) Indication to show energizeing (pilot indicator and pump driving indicator) IrDA communication, Data logger (interval, Alarm trend, Station ID control) Peak value/Average value display, Buzzer selector switch (2steps High/Low) Bump test function

Remarks : Specify one detectable gas and range when ordering.

DETECTABLE GAS AND MEASURING RANGE FOR MODEL SC-8000

Detectable gas	Chemical formula	Measuring range (ppm)	Increments (ppm)	Preset alarm (ppm)	
				1st	2nd
Ammonia	NH ₃	0~75.0	0.5	25.0	50.0
Arsine	AsH ₃	0~0.200	0.001	0.050	0.100
Bromine	Br ₂	0~1.00	0.01	0.30	0.60
Carbon monoxide	CO	0~75.0	0.5	25.0	50.0
Chlorine	Cl ₂	0~1.50	0.01	0.50	1.00
Chlorine trifluoride	CLF ₃	0~1.00	0.01	0.30	0.60
Diborane	B ₂ H ₆	0~0.300	0.002	0.100	0.200
Flourine	F ₂	0~3.00	0.02	1.00	2.00
Germane	GeH ₄	0~0.800	0.005	0.200	0.400
Hydrogen bromide	HBr	0~6.00	0.05	2.00	4.00
Hydrogen chloride	HCl	0~6.00	0.05	2.00	4.00
Hydrogen cyanide	HCN	0~15.0	0.1	4.0	10.0
Hydrogen fluoride	HF	0~9.00	0.05	3.00	6.00
Hydrogen iodide	HI	0~5.00	0.05	1.50	3.00
Hydrogen selenide	H ₂ Se	0~0.200	0.001	0.050	0.100
Hydrogen sulfide	H ₂ S	0~30.0	0.2	5.0	10.0
Nitrogen dioxide	NO ₂	0~15.0	0.1	5.0	10.0
Nitrogen monoxide	NO	0~100	1	25	50
Ozone	O ₃	0~1.00	0.01	0.30	0.60
Phosphine	PH ₃	0~1.00	0.01	0.30	0.60
Phosphorus trifluoride	PF ₃	0~10.0	0.1	2.0	4.0
Silane	SiH ₄	0~15.0	0.1	5.0	10.0
Sulfur dioxide	SO ₂	0~6.00	0.05	2.00	4.00

Remarks : Specify one detectable gas and range when ordering.

Standard accessories

- Dry battery unit BUD-8000
- AA size alkaline battery 3pcs
- Gas sampling probe
- Gas sampling hose (spiral 1m)
- Neck/shoulder strap

Optional accessories

- Lithium-ion battery unit BUL-8000
- AC powered charger
 - { Input : AC100V - AC240V 50/60Hz
 - { Output : DC12V 1.25A
- Data-logging software
- Waist strap
- Sampling probe holder on the neck/shoulder strap
- Carrying box (aluminium)

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