

RIKEN

OPTICAL GAS INDICATOR

MODEL FI-21



SOLVENT GAS

Toluene
MEK
Xylene
Ethyl acetate
IPA

GAS PURITY

Helium
Hydrogen
Carbon dioxide
Oxygen

FUMIGATION GAS

Sulfuryl Flouride
Methyl bromide
Methyl iodide
Propylene oxide
Phosphine

Features

- Capable of measurement for up to 8 kinds of gases.
- Gas can be selected with key operation.
- Direct digital readout.
- Built-in sampling pump.
- High accurate measurement with CCD and Fourier analysis technology.
- Data logging stores up to 100 readings.
- Few consumable parts saves maintenance cost.

Typical Applications

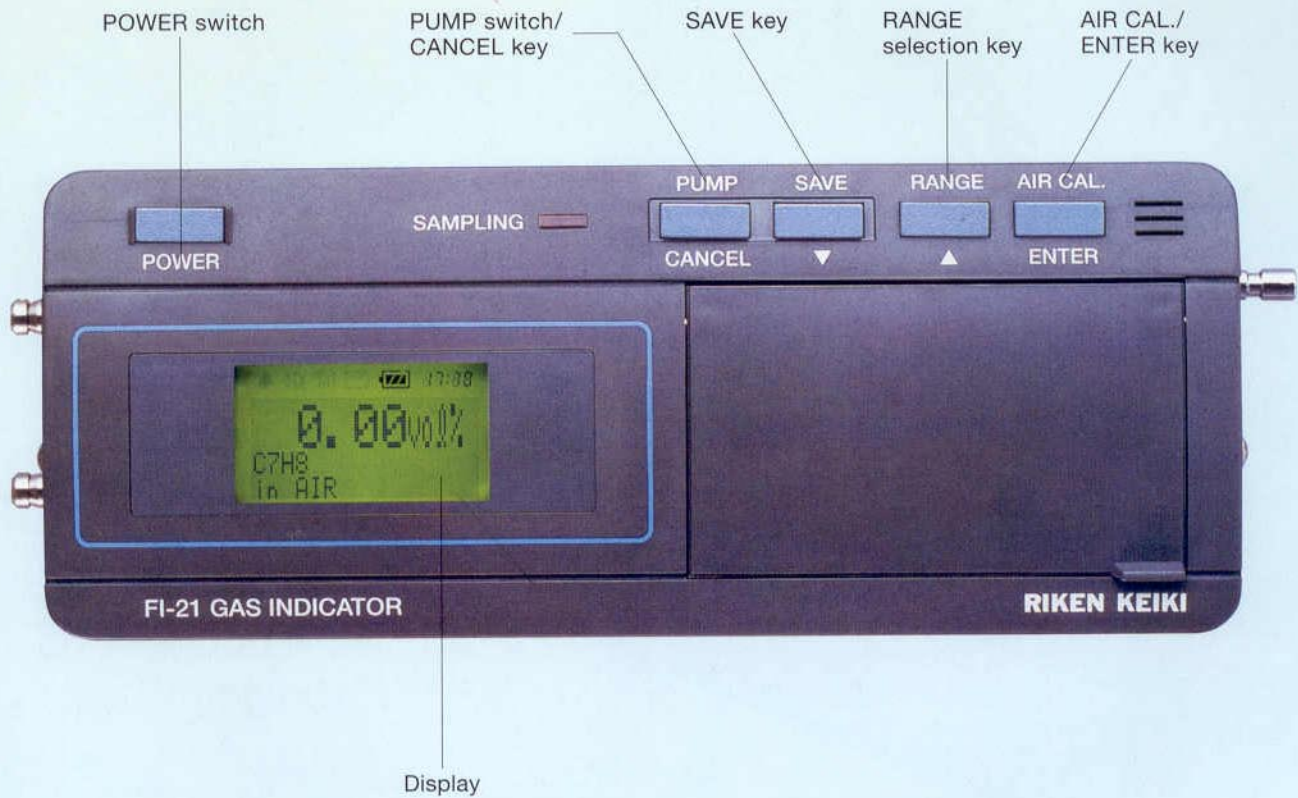
- Measurement of gas concentrations for solvent gases, fumigation gases, etc.
- Measurement of gas purity.
- Measurement of fuel calorie.
- Measurement of anaesthetic gases.



RIKEN KEIKI

Unique Electronics Interferometer Method Provides High Accuracy

Top view



Display screen (Example)



TYPE-51 For solvent gas (vol%)



TYPE-53 For fumigation gas

MEASURING GASES AND RANGES

Please specify the type listed below when ordering.

MODEL FI-21	Name of gas	Symbol	Measuring range	Minimum digit
TYPE-51 (FOR SOLVENT GASES vol%)	Toluene in air	C7H8 in AIR	0~2vol%	0.002 vol%/digit
	Methyl ethyl ketone in air	MEK in AIR	0~5vol%	0.005 vol%/digit
	Ethyl acetate in air	EtAc in AIR	0~5vol%	0.002 vol%/digit
	Xylene in air	C8H10 in AIR	0~1vol%	0.002 vol%/digit
	Isopropyl alcohol in air	IPA in AIR	0~2vol%	0.005 vol%/digit
	Methyl isobutyl ketone in air	MIBK in AIR	0~1vol%	0.002 vol%/digit
	Methanol in air	CH3OH in AIR	0~6vol%	0.02 vol%/digit
TYPE-52 (FOR SOLVENT GASES %LEL)	Toluene in air	C7H8 in AIR	0~100%LEL	0.2 %LEL/digit
	Methyl ethyl ketone in air	MEK in AIR	0~100%LEL	0.2 %LEL/digit
	Ethyl acetate in air	EtAc in AIR	0~100%LEL	0.2 %LEL/digit
	Xylene in air	C8H10 in AIR	0~100%LEL	0.2 %LEL/digit
	Isopropyl alcohol in air	IPA in AIR	0~100%LEL	0.2 %LEL/digit
	Methyl isobutyl ketone in air	MIBK in AIR	0~100%LEL	0.2 %LEL/digit
	Methanol in air	CH3OH in AIR	0~100%LEL	0.2 %LEL/digit
TYPE-53 (FOR FUMIGATION GASES)	Methyl bromide in air	CH3Br in AIR	0~200mg/l	0.2 mg/digit
	Phosphine in air	PH3 in AIR	0~50mg/l	0.1mg/digit
	Methyl iodide in air	CH3I in AIR	0~200mg/l	0.2mg/digit
	Methyl bromide in air	CH3Br in AIR	0~5vol%	0.005 vol%/digit
	Propylene oxide in air	PO in AIR	0~10vol%	0.005 vol%/digit
	Sulfuryl Flouride	SO2F2 in AIR	0~200mg/l	0.2 vol%/digit 0.2 mg/digit
TYPE-54 (FOR GAS PURITY)	Helium in air	He in AIR	0~100vol%	0.05 vol%/digit
	Neon in air	Ne in AIR	0~100vol%	0.1 vol%/digit
	Hydrogen in air	H2 in AIR	0~100vol%	0.1 vol%/digit
	Methane in air	CH4 in AIR	0~100vol%	0.1 vol%/digit
	Carbon dioxide in air	CO2 in AIR	0~100vol%	0.1 vol%/digit
	Ammonia in air	NH3 in AIR	0~100vol%	0.2 vol%/digit
	Hydrogen in N ²	H2 in N2	0~100vol%	0.1 vol%/digit
	Hydrogen in CO ²	H2 in CO2	0~100vol%	0.05 vol%/digit
TYPE-55 (FOR ANAESTHETIC GASES)	Halothane in O ²	HALOTHANE in O2	0~6 vol%	0.01 vol%/digit
	Isoflurane in O ²	ISOFLURANE in O2	0~8 vol%	0.01 vol%/digit
	Sevoflurane in O ²	SEVOFLURANE in O2	0~10vol%	0.01 vol%/digit
	Desflurane in O ²	DESFLURANE in O2	0~20vol%	0.02 vol%/digit
	Halothane in air	HALOTHANE in AIR	0~6 vol%	0.01 vol%/digit
	Isoflurane in air	ISOFLURANE in AIR	0~8 vol%	0.01 vol%/digit
	Sevoflurane in air	SEVOFLURANE in AIR	0~10vol%	0.01 vol%/digit
Desflurane in air	DESFLURANE in AIR	0~20vol%	0.02 vol%/digit	

Please consult with us for other gases.

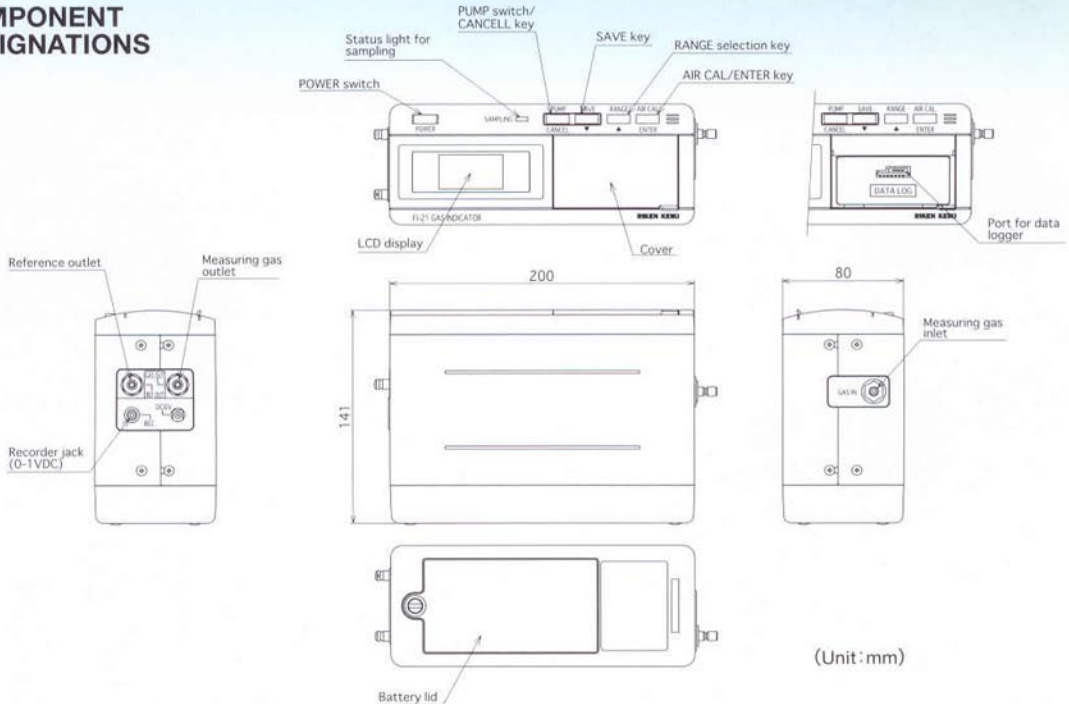
SPECIFICATIONS

MODEL FI-21

Model	FI-21
Detection principle	Optical interferometric method
Display	Digital display (Measuring gas, base gas, gas concentration, time, etc.)
Structure	Non-explosion proof
Measuring method	Batch measurement
Gas sampling method	Suction by internal pump (Pump stops operation while reading)
Indication accuracy	Within $\pm 3\%$ of the indication value ± 1 digit
Outputs	Data logger, 0-1VDC
Data logging function	Day, time (24 hours) and measurement results Maximum recoding : 100 data points
Operating temp. & humidity	5-35°C, below 80%R.H.
Operating pressure	Atmospheric pressure
Power source	C size alkaline batteries (4pcs)
Battery life	Approx. 20 hours (without sampling)
Dimensions & weight	Approx. 200 (W) \times 80 (H) \times 145 (D) mm, 2kg
Standard accessories	Carrying case, absorption tube, sampling hose, C size alkaline batteries (4pcs), sampling "T" piece (For anaesthetic application only)

Specifications subject to change without notice.

COMPONENT DESIGNATIONS



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