

# OPTICAL GAS INDICATOR MODEL FI-21

**Toluene** 

MEK

**Xylene** 

**SOLVENT GAS** 

Ethyl acetate

IPA

Methyl bromide Methyl iodide

**FUMIGATION GAS** 

Propylene oxide
Phosphine

Helium

Hydrogen

**GAS PURITY** 

Carbon dioxide
Oxygen

### **Features**

Capable of measurement for up to 8 kinds of gases.

FI-21 GAS INDICATOR

- 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

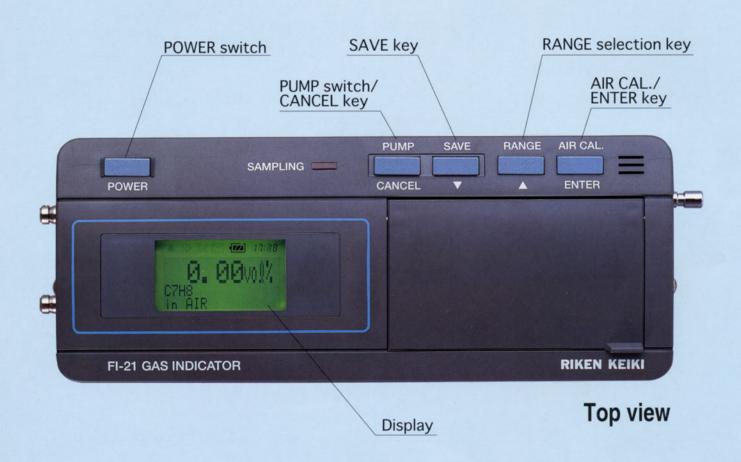
- Measurement of gas concentrations for solvent gases, fumigation gases, etc.
- Measurement of gas purity.
- Measurement of fuel calorie.
- Measurement of anaesthetic gases.







# Unique Electronics Interferometer Method Provides High Accuracy



# Display screen (Example)



TYPE-01 For solvent gas (vol%)



TYPE-03 For fumigation gas



# **MEASURING GASES AND RANGES**

Please specify the type listed below when ordering.

#### Model FI-21 TYPE-01 (FOR SOLVENT GASES vol%)

Name of gas	Symbol	Measuring range
Toluene in air	C7H8 in AIR	0~2vol%
Methyl ethyl ketone in air	MEK in AIR	0~5vol%
Ethyl acetate in air	EtAc in AIR	0~5vol%
Xylene in air	C8H10 in AIR	0~1vol%
Isopropyl alcohol in air	IPA in AIR	0~2vol%
Methyl isobutyl ketone in air	MIBK in AIR	0~1vol%
Methanol in air	CH3OH in AIR	0~6vol%

#### Model FI-21 TYPE-02 (FOR SOLVENT GASES %LEL)

Name of gas	Symbol	Measuring range
Toluene in air	C7H8 in AIR	0~100%LEL
Methyl ethyl ketone in air	MEK in AIR	0~100%LEL
Ethyl acetate in air	EtAc in AIR	0~100%LEL
Xylene in air	C8H10 in AIR	0~100%LEL
Isopropyl alcohol in air	IPA in AIR	0~100%LEL
Methyl isobutyl ketone in air	MIBK in AIR	0~100%LEL
Methanol in air	CH3OH in AIR	0~100%LEL

#### Model FI-21 TYPE-03 (FOR FUMIGATION GASES)

Name of gas	Symbol	Measuring range
Methyl bromide in air	CH3Br in AIR	0~200mg/l
Phosphine in air	PH3 in AIR	0~50mg/l
Methyl iodide in air	CH3I in AIR	0~200mg/l
Methyl bromide in air	CH3Br in AIR	0~5vol%
Propylene oxide in air	PO in AIR	0~10vol%
Oxygen in N <sub>2</sub>	O2 in N2	0~100vol%

#### Model FI-21 TYPE-04 (FOR GAS PURITY)

Name of gas	Symbol	Measuring range
Helium in air	He in AIR	0~100vol%
Neon in air	Ne in AIR	0~100vol%
Hydrogen in air	H2 in AIR	0~100vol%
Methane in air	CH4 in AIR	0~100vol%
Carbon dioxide in air	CO2 in AIR	0~100vol%
Ammonia in air	NH3 in AIR	0~100vol%
Hydrogen in N <sub>2</sub>	H2 in N2	0~100vol%
Hydrogen in CO <sub>2</sub>	H2 in CO2	0~100vol%

#### Model FI-21 TYPE-05 (FOR ANAESTHETIC GASES)

Name of gas	Symbol	Measuring range
Halothane in O <sub>2</sub>	HALOTHANE in O2	0~6vol%
Isoflurane in O <sub>2</sub>	ISOFLURANE in O2	0~8vol%
Sevoflurane in O <sub>2</sub>	SEVOFLURANE in O2	0~10vol%
Desflurane in O <sub>2</sub>	DESFLURANE in O2	0~20vol%
Halothane in air	HALOTHANE in AIR	0~6vol%
Isoflurane in air	ISOFLURANE in AIR	0~8vol%
Sevoflurane in air	SEVOFLURANE in AIR	0~10vol%
Desflurane in air	DESFLURANE in AIR	0~20vol%

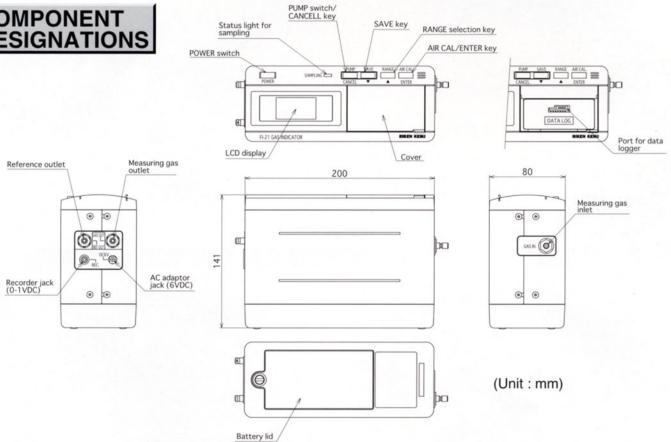
# **SPECIFICATIONS**



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 $\pm 1$ digit
Outputs	Data logger, 0-1VDC
Data logging function	Day, time (24 hours) and measurement results Maximum recording : 100 data points
Operating temp. & humidity	5-35°C, below 80%R.H.
Operating pressure	Atmospheric pressure
Power source	C size alkaline batteries (4pcs) or AC adaptor (option)
Battery life	Approx. 20 hours (without sampling)
Dimensions & weight	Approx. 200(W)×80(H)×145(D)mm, 2kg
Standard accessories	Carrying case, absorption tube, sampling hose, C size alkaline batteries (4pcs), sampling "T" piece (For anaesthetic application only)
Optional accessories	AC adaptor, data logger software, cable for data logger
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Specifications subject to change without notice.

## COMPONENT **DESIGNATIONS**







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