

## SPECIFICATIONS

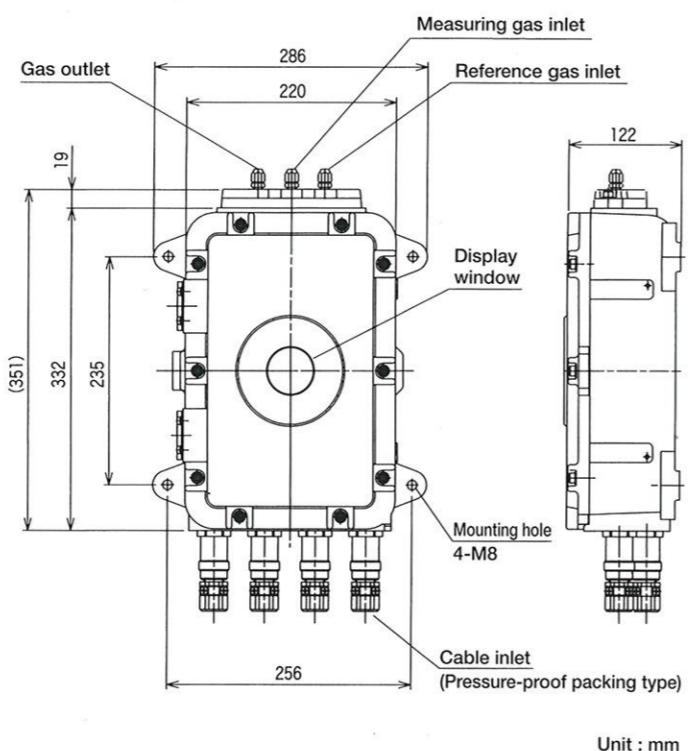
Model	FI-800
Detection principle	Optical interferometric method
Measuring gas	Combustible gases & vapors (Please specify when ordering)
Outputs	4~20mA (Current output type), resistive load Max 300 Ω
Display	Digital LCD display
Relay contacts	1 <sup>st</sup> alarm contact, 2 <sup>nd</sup> alarm contact
Alarm indication	AL1, AL2, LED light
Self-diagnostic function	Low sample flow, decrease of light amount for interferometer light source, decrease of interferometer contrast
Operating temp. & humidity	-10°C ~ +40°C, below 80%RH (Condensing gas inside FI-800 is not available)
Power requirement	100VAC ~ 220VAC ± 10%, 50/60Hz, max.80VA
Structure	Flame-proof Exd II B + H2T4, Approval No.C16730 in Japan
Outer dimensions	Approx. 220 (W) × 332 (H) × 122 (D)mm
Weight	Approx. 16kg

• Specifications subject to change without notice.

## MEASURING RANGE

Measuring gas	Measuring range
Hydrogen	0 ~ 100vol.%
Toluene	0 ~ 100%LEL
MEK	0 ~ 100%LEL
Xylene	0 ~ 100%LEL
IPA	0 ~ 100%LEL
Ethyl acetate	0 ~ 100%LEL
Ethyl alcohol	0 ~ 100%LEL
Normal hexane	0 ~ 100%LEL
Methyl alcohol	0 ~ 100%LEL
Butyl acetate	0 ~ 100%LEL
MIBK	0 ~ 100%LEL
Propane-air	50 ~ 75MJ/m <sup>3</sup>
City gas (LNG)	25 ~ 50MJ/m <sup>3</sup>

## DESIGNATIONS



Unit : mm

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# RIKEN

Optical interferometric method based on image sensor

# GAS ANALYZER

## MODEL FI-800

Explosion proof for Hydrogen  
Exd II B + H2T4  
Approval No.C16730

### SOLVENT GAS MONITORING

In drying oven  
MEK, Toluene, Xylene, IPA,  
Ethyl acetate

### FUEL GAS CALORIE CONTROL

City gas, LPG

### PURITY CONTROL

In inert gas, in air  
H<sub>2</sub> in air



### Features

- Minimal maintenance cost.
- Applied LED as light source makes low deterioration.
- Optical interferometric sensor makes no sensitivity deterioration.
- No sensor poisoning by corrosive gases and silicone vapors.
- Provides temperature and pressure compensation.



95QR 007

Object place of business  
Tokyo factory, Okegawa factory



97ER 005

Object place of business  
Tokyo factory



**RIKEN KEIKI**

Only one in the world !!  
Explosion-proof with H2T4

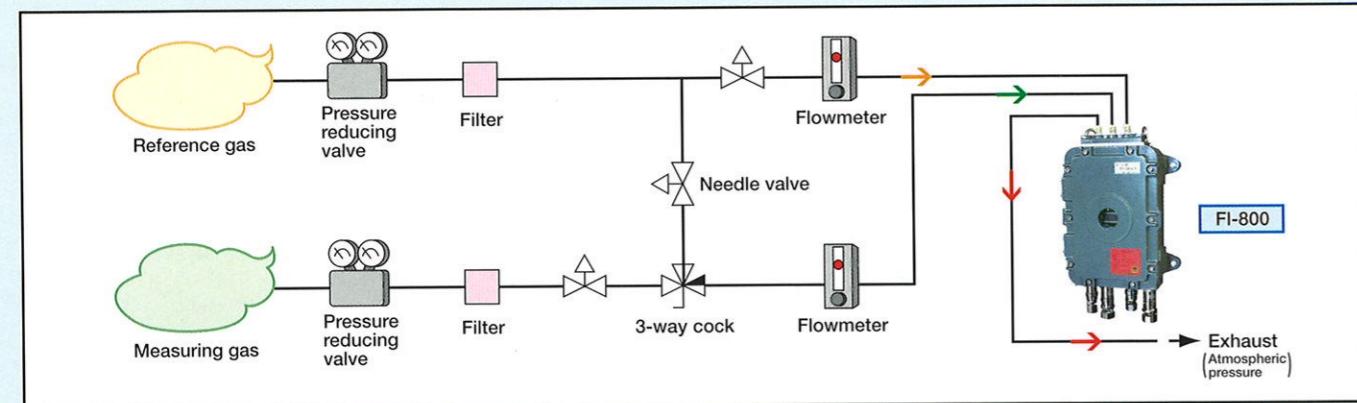
# GAS ANALYZER

Model FI-800

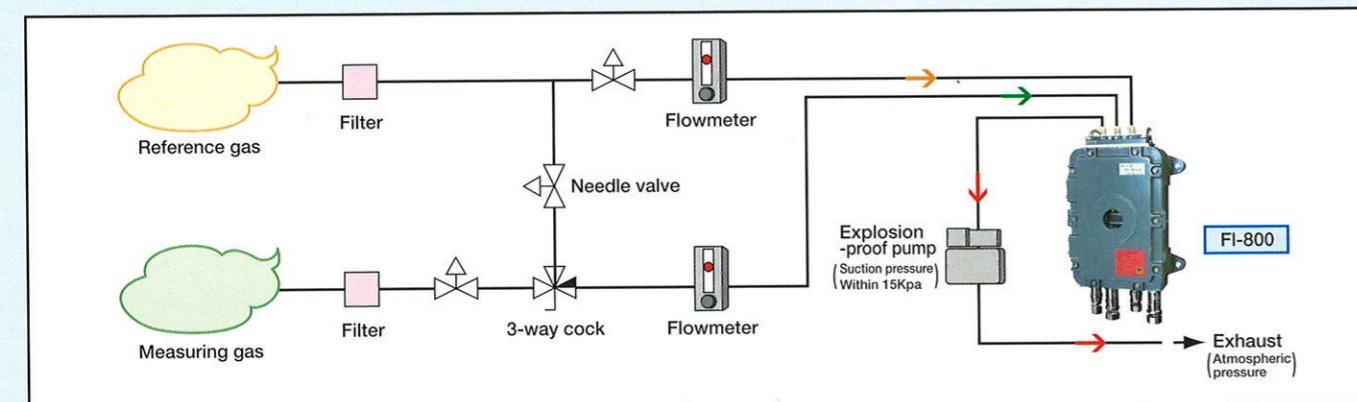
- Explosion-proof indicator for Hydrogen gas accepts any installation places.
- Applied optical interferometer as measuring principle keeps distinguished long stability.
- No sensitivity deterioration against corrosive gases, silicon vapors, etc.
- Long life light source with LED.
- High accurate measurement with Fourier analysis technology.
- No reference gas required for the measurement of fuel gas calorie.
- Continuous measurement, minimal maintenance cost.

## Measuring method

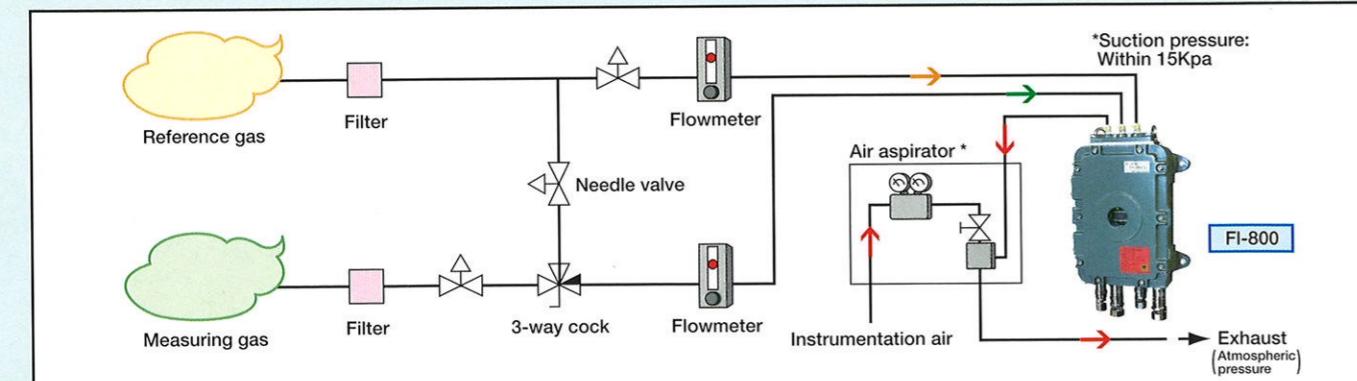
### Case1 : Measurement of pressurized gas



### Case2 : Measurement of gas in atmospheric pressure (Sample drawing with pump)

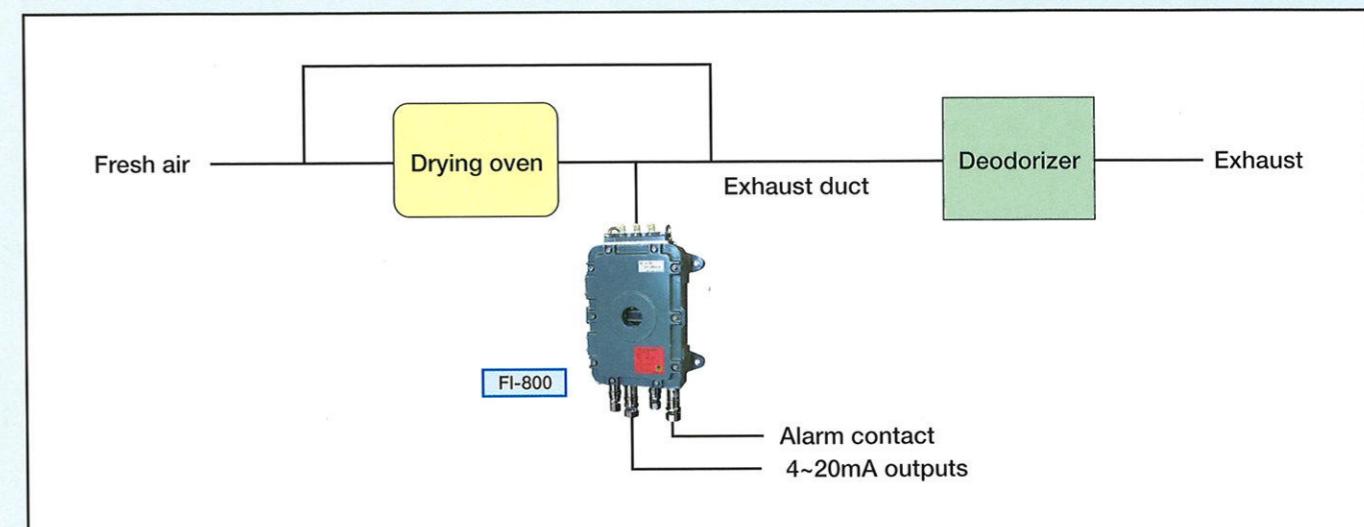


### Case3 : Measurement of gas in atmospheric pressure (Sample drawing with air aspirator)

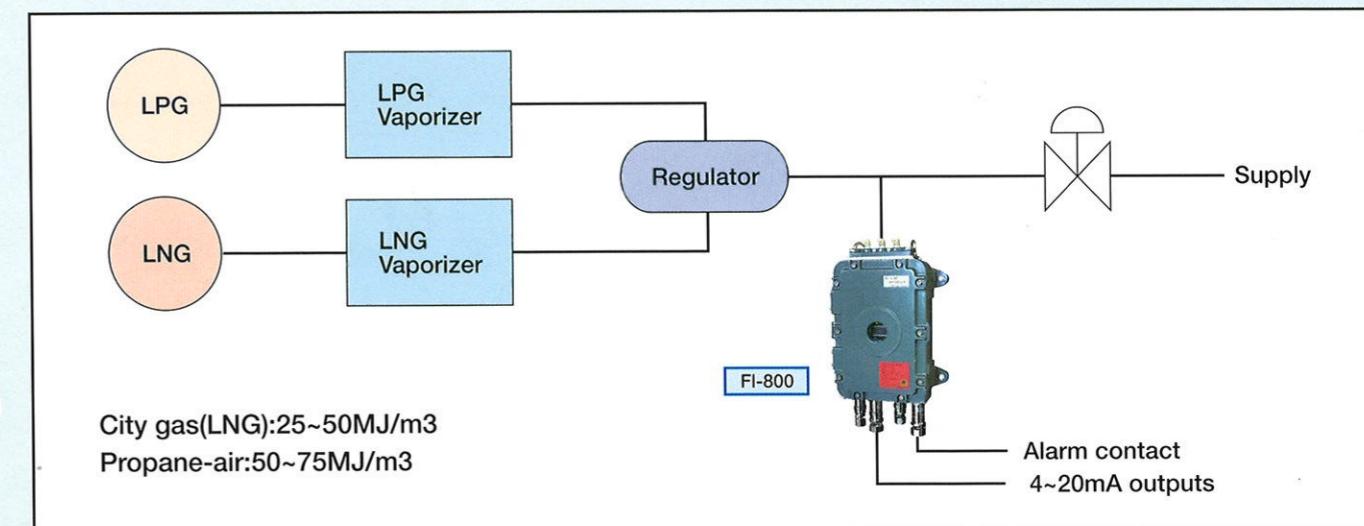


## Applications

### To Control solvent gas concentration in drying facilities



### To Control the calorie of city gas, etc.



### To Control the purity of several gases

