

RIKEN

OS-4000

# INFRARED CO<sub>2</sub> GAS MONITOR RI-215 series



**Model RI-215A**  
(DIFFUSION TYPE)



**Model RI-215D**  
(SAMPLE DRAWING TYPE)

### Features

- Easy to read LCD digital display
- Compact, lightweight and easy installation
- Highly reliable Non-Dispersive Infrared gas absorption method used
- Recorder output signal
- Automatic control of ventilation in autos and buildings provides energy for energy saving
- Alarm contact output provided



**RIKEN KEIKI CO.,LTD.**

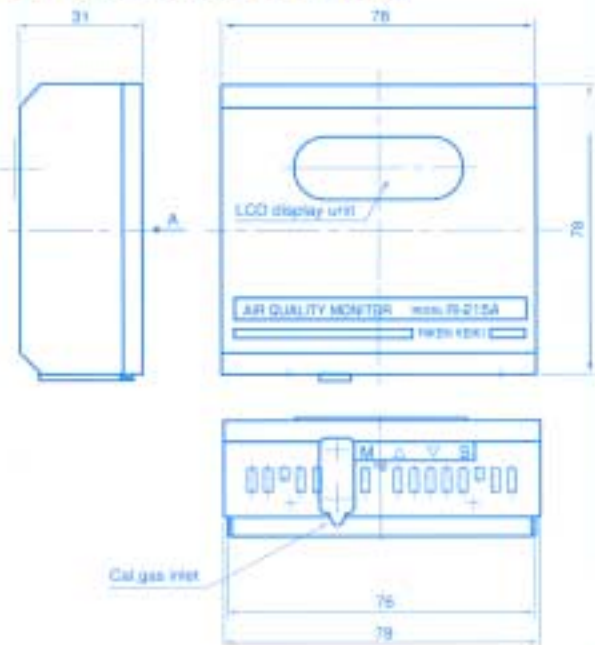
## GENERAL DESCRIPTION

Riken Model RI-215A and RI-215D are compact and highly reliable CO<sub>2</sub> monitors designed for ventilation control. They utilize highly reliable Non Dispersive Infrared gas absorption technique to provide exceptional long term stability and low maintenance. These monitors are intended to provide years of trouble-free CO<sub>2</sub> monitoring for safety or for ventilation control of homes, offices, laboratories, etc. Two styles are available; Model RI-215D (sample draw version with internal pump), and Model RI-215A (diffusion, compact version). Three detection ranges are also available, with full scales of either 2000 ppm, 5000 ppm, or 9990 ppm.

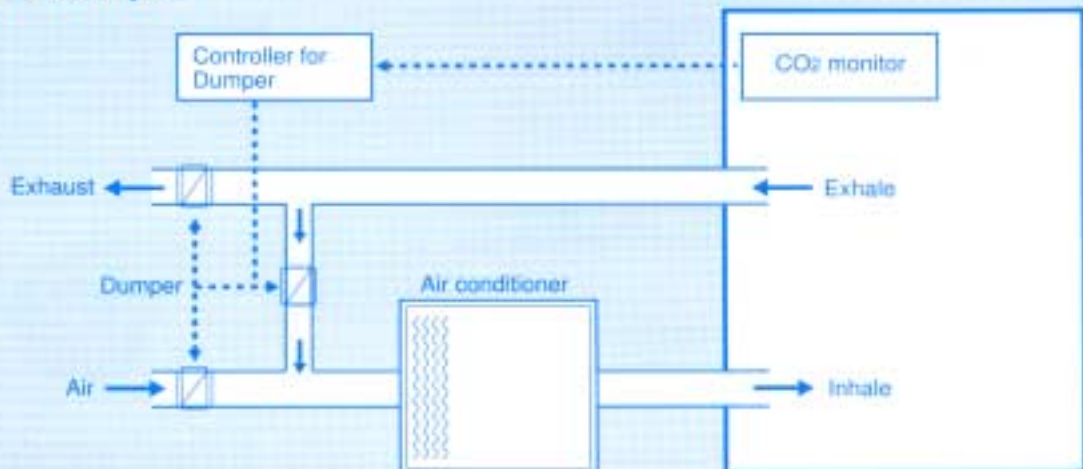
### RI-215A (Diffusion type)



### Dimensions & designation



### Application example



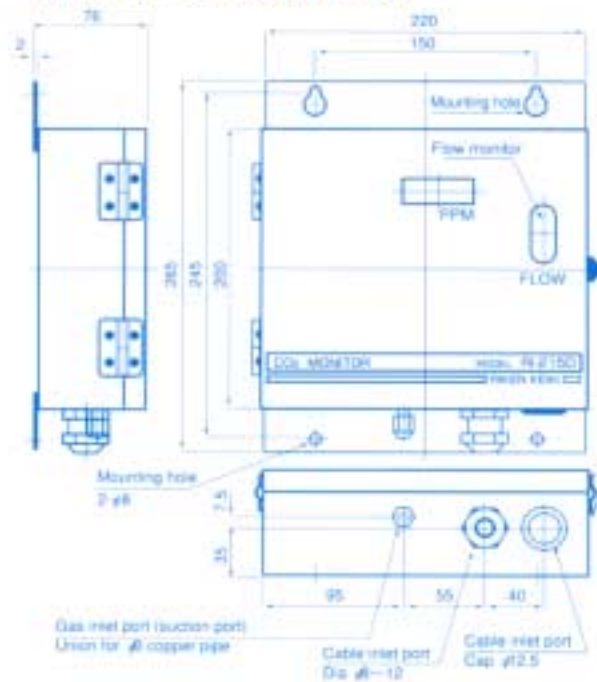


# RI-215series

## RI-215D (Sample-drawing type)



## Dimensions & designation



## CO2 gas density and symptom

CO2 gas in air (%)	Symptom
0.1	*Building control law/Office CO2 hygiene control level in Japan
0.5	* TLV (Threshold Limit Value) Level
1~2	* Feel uncomfortable.
3~5	* Breathing increases due to stimulus of respiratory organs. Pulse and blood pressure increase. Eventually, headache and dizziness occur.
6~7	* Breathing becomes difficult.
7~10	* Unconscious within a few minutes.
20	* Unconscious within a few seconds and heart stops pulsating.

# INFRARED CO<sub>2</sub> GAS MONITOR RI-215 series

## SPECIFICATIONS

Model		RI-215A	RI-215D
Detection principle		Non dispersive infrared absorption method (NDIR)	
Measuring gas		Carbon dioxide (CO <sub>2</sub> ) in air	
Measuring range		0-2000ppm 0-5000ppm 0-9990ppm } * Specify one of the left ranges when ordering	
Increment		1 ppm/digit for 0-2000ppm 10 ppm/digit for 2000-9990ppm	
Repeatability		±3% of full scale (At constant temp. and humidity conditions.)	
Output signal		0-10VDC linear (Load resistance: Min. 500kΩ) 4-20mADC linear (Load resistance: Max. 300Ω) } Specify one of them when ordering	
Flow rate			Above 1.0 liter/min
Alarm	Alarm range	50 ppm - Full scale (Adjustable in step of 10 ppm) * Standard alarm point 1000ppm±100ppm	
	Alarm	125VAC, 0.5A (Load resistance), Dry contact (Normal open)	
Operating conditions		0-40°C (32-104°F), 10-90%RH (Non-condensing)	
Warming up time		30 minutes for full warm up (Display starts after 1 minute.)	
Power requirement		24VDC ±10% or 24VAC ±10%	AC100V, AC110V, AC220V, ±10%, 50/60Hz
Power consumption		Less than 4VA	Less than 12VA
Installation method		Wall mounting vertically	
Outer dimensions		Approx 78(W)X78(H)X31(D)mm Approx 3.1"(W)X3.1"(H)X1.2"(D)	Approx 220(W) X 200(H) X 76(D) mm Approx 8.7"(W) X 7.9"(H) X 3.0"(D)
Painting color		Munsell 2.5Y9/2 (Beige)	
Weight		Approx. 200g(6.50 Oz)	Approx. 3.6kg(7.9 lb)

Specifications subject to change without notice.



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