

# RIKEN

C2E-0311

*Environmental gas monitor for semiconductor fabs  
and exhaust gas from manufacturing tools and scrubbers*

## HIGH SENSITIVITY TOXIC GAS MONITOR

### MODEL **FP-300**

Photoelectric photometry method  
with detection tape

**The World  
Smallest!**



**Micro cassette**  
Approx. same size as 8mm video cassette



## FEATURES

- Small and compact.
- Highly sensitive and ideal for low gas concentrations (ppb detection).
- Interference-free detection.
- Easy detection tape replacement with plug-in cassette.
- Tape remainder display and tape end warning alarm provided.



**RIKEN KEIKI**

# Model FP-300

## Detectable gases and detection range (For environment / For scrubber)

Detectable gas		TLV	Detection range	Resolution	1 <sup>st</sup> Alarm	2 <sup>nd</sup> Alarm	Tape No.
Ammonia	NH <sub>3</sub>	25ppm	0.5~4ppm	0.1ppm	1ppm	2ppm	FC-010
Arsine	AsH <sub>3</sub>	50ppb	0~150ppb	1ppb	50ppb	100ppb	FCL-001
Chlorine	Cl <sub>2</sub>	0.5ppm	★ 0~0.8ppm	0.01ppm	0.25ppm	0.5ppm	FCL-105
			0~1.5ppm				
Diborane	B <sub>2</sub> H <sub>6</sub>	100ppb	0~300ppb	5ppb	50ppb	100ppb	FCL-002
Hydrogen chloride	HCl	5ppm	0.25~1ppm	0.025ppm	0.5ppm	0.75ppm	FC-004
			1.5~8ppm	0.1ppm	2.5ppm	5ppm	FC-005
Hydrogen fluoride	HF	3ppm	0~9ppmb	0.1ppm	1.5ppm	3ppm	FC-006
Hydrogen sulfide	H <sub>2</sub> S	10ppm	0~100pp	1ppb	17ppb	34ppb	FCL-001
			0~10ppm	0.05ppm	1ppm	2ppm	FCL-001
Phosphine	PH <sub>3</sub>	300ppb	★ 0~500ppb	5ppb	150ppb	300ppb	FCL-001
			0~900ppb				
Silane	SiH <sub>4</sub>	5ppm	★ 0~8ppm	0.1ppm	2.5ppm	5ppm	FCL-002
			0~15ppm				

Note : Detection range marked by ★ is for scrubber use.

• please specify name of gas and measuring range when ordering.

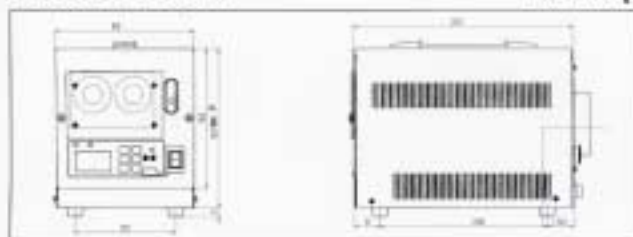
## Specifications

Model	FP-300
Detection principle	Photoelectric photometry method using tape cassette
Detection tape	Plug-in cassette
Detectable gas	See the table above.
Accuracy	Within ±20% +1 of indication
Operation time of the tape	1 month(with no alarm) Tape remainder display, Tape end warning
Alarm preset point	See the table above.
Alarm functions	Latching(standard)or self reset Lamp(Caution:Yellow,Warning:Red)and buzzer
Self-diagnosis	Sensor failure, Low flow, Tape failure, Tape end warning, Failure of tape setting, System error
External output signal	4-20mA(300Ω at maximum load resistance)
Operating temperature & humidity	5~35°C 30~90%RH(nom-condensing)
Power supply & power	24VDC ±10% for panel mounting 100VAC, 110VAC, 117VAC, 220VAC for desk top
	[Panel mounting] Approx. 164(W)×184(H)×261(D) Approx. 5.5kg
Dimensions & weight	[Desk top] Approx. 164(W)×198(H)×263(D) Approx. 6.5kg

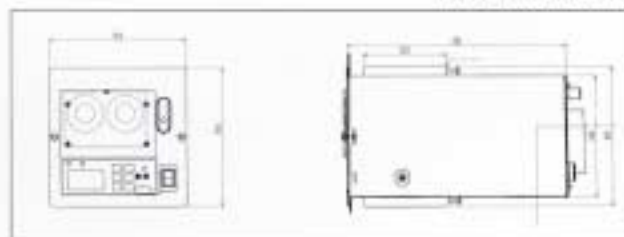
• Specifications subject to change without notice.

## Dimensions

Desk top



Panel mounting



## Applications examples

- Detecting of uncaptured gas from scrubber.
- Environmental monitoring of Semiconductor fabs.



## RIKEN KEIKI CO.,LTD.

2-7-6, Azusawa, Itabashi-ku, Tokyo 174-8744, Japan  
 Phone: TOKYO (03)3966-1113  
 Telefax: TOKYO (03)3558-9110(GIII)  
 E-mail: intdept@rikenkeiki.co.jp  
 Telex : 272 2638 RKNFNE  
 Cable: RIKENFINE TOKYO



Certified AIR SAFETY  
 2233 NW 23<sup>rd</sup> Ave.  
 Portland, OR 97210  
 Tel: 503-226-2109  
 Fax: 503-226-0988

[info@certifiedAIRSAFETY.COM](mailto:info@certifiedAIRSAFETY.COM)  
[www.certifiedAIRSAFETY.COM](http://www.certifiedAIRSAFETY.COM)