

RIKEN**HIGHLY SENSITIVE TOXIC
GAS MONITOR****MODEL FP-250A**

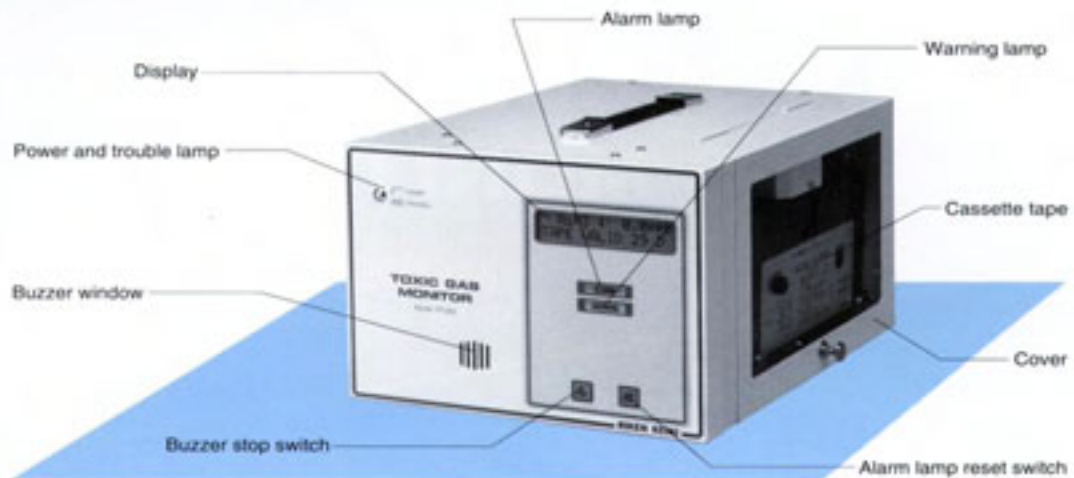
Cassette tape system with gas card

**Features**

1. Interference-free detection (PPB or PPM digital display)
2. Detection of low gas concentrations (TLV level)
3. Easy to replace cassette tape (cassette remainder display included)
4. Easy to change to other gases by replacing the gas card.
5. Provision for connection to personal computer (RS-232C interface: Optional)
6. Easy to check the detection function and alarm operation with check card.
7. Desk top size promotes easy transportability

**RIKEN KEIKI**

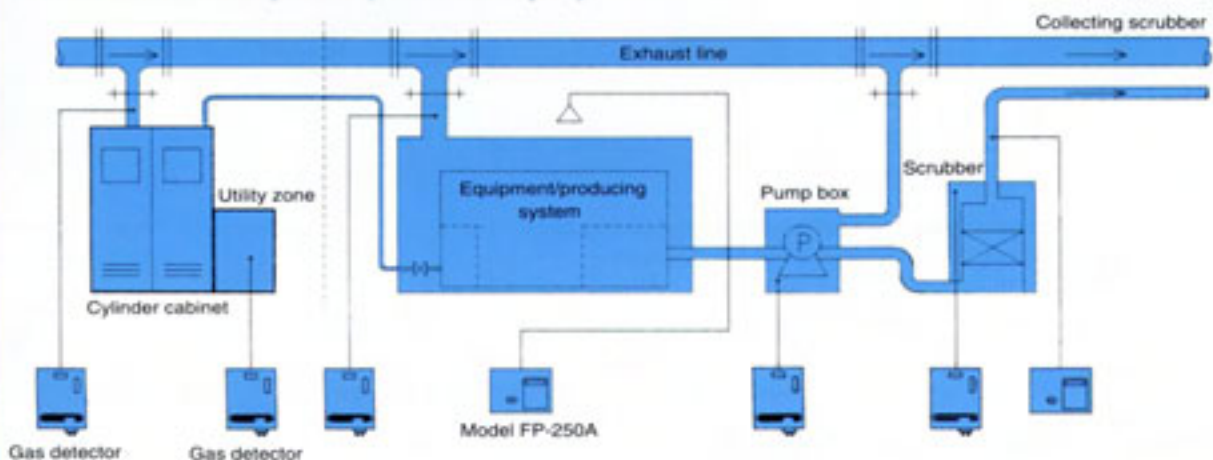
Part Designation



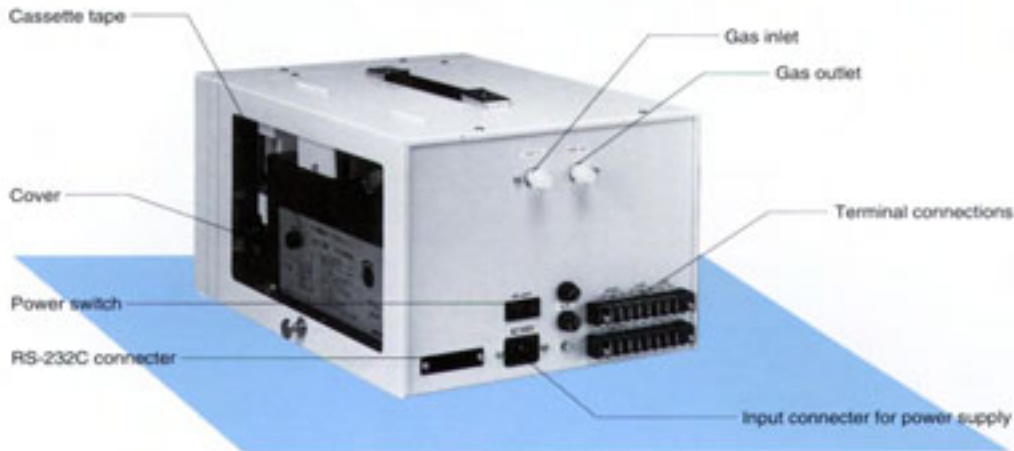
The FP-250A is a highly sensitive toxic gas monitor using a gas detection cassette tape which is almost free of interference from other gases. As the detection tape responds by a chemical reaction with the gas being measured, there is no interference from hydrogen or organic gases. Its best application then is in monitoring of the target gas at the outlet of an absorption scrubber, as well as in monitoring of the work environment for personnel safety..

Since the cassette can be replaced so quickly and easily, detection of multiple gases is practical.

Detection area/point (For example)

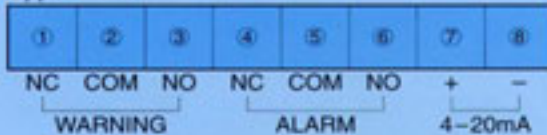


MODEL FP-250A

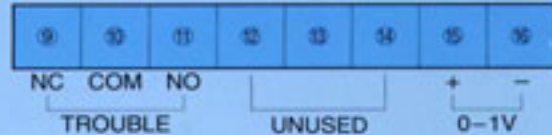


Terminal connections

Upper block



Lower block



Specifications

Detection principle	Photoelectric photometry method using paper tape cassette
Gas detection tape	Cassette method
Alarm response time	Within 60 seconds when exposed to gas concentration of 1.6 times alarm point
Accuracy	Within $\pm 20\%$ of indication value +1 digit at constant conditions
Display	PPB or PPM digital display
Operating time for cassette tape	One month (with no alarm) • Tape remainder display • Alarm display at tape end
Alarm preset value	Warning: 1/6 of full scale, Alarm: 1/3 of full scale
Alarm operation	Latching (standard) or non-latching Lamp (warning – yellow, alarm – red) and buzzer
Self-diagnosis	Flow fail, warning of tape end or tape damage
Output	4-20mA (Non-isolated), 0-1VDC. (RS-232C interface-Optional)
Operating temperature and humidity	5°C-35°C (41°F-95°F), 30%-90%RH
Power supply and power consumption	AC100V, AC115V or AC220V, 50/60Hz, 20VA
Gas inlet	1/4" OD tubing fitting
Outer dimensions and weight	270(W) × 212(H) × 380(D), Approx. 11kg / 10.6"(W) × 8.3"(H) × 15.0"(D), 24lb
Standard accessories	Check card: 1pc Dust filter: 1pc Fuse (2A): 2pc AC power card: 1pc Gas detection cassette tape: 1roll (specify gas and range)
Optional accessories	Additional gas detection cassette tape, Check card, Dust filter, Fuse, RS-232C output

Detectable gases and detection ranges for FP-250A

Detectable gas	TLV value	Detection range	Resolution	Measuring cycle	Cassette tape
Arsine (AsH ₃)	50ppb	100ppb	2.5ppb	for 20 seconds	FT-001
		150ppb	2.5ppb	for 20 seconds	FT-001
		200ppb	2.5ppb	for 20 seconds	FT-001
Phosphine (PH ₃)	300ppb	150ppb	2.5ppb	for 30 seconds	FT-001
		600ppb	5ppb	for 20 seconds	FT-001
		900ppb	5ppb	for 15 seconds	FT-001
Silane (SiH ₄)	5ppm	15ppm	0.25ppm	for 60 seconds	FT-002
Diborane (B ₂ H ₆)	100ppb	200ppb	5ppb	for 60 seconds	FT-002
		300ppb	5ppb	for 60 seconds	FT-002
Hydrogen sulfide (H ₂ S)	10ppm	100ppb	1ppb	for 180 seconds	FT-001
		300ppb	5ppb	for 180 seconds	FT-001
		1000ppb	10ppb	for 30 seconds	FT-001
		10ppm	0.1ppm	for 10 seconds	FT-001
Hydrogen selenide (H ₂ Se)	50ppb	200ppb	2.5ppb	for 60 seconds	FT-001
Chlorine (Cl ₂)	0.5ppm	1.5ppm	0.025ppm	for 20 seconds	FT-003
		1.5ppm	0.01ppm	for 20 seconds	FT-003
Disilane (Si ₂ H ₆)	5ppm	15ppm	0.25ppm	for 60 seconds	FT-001
Hydrogen chloride (HCl)	5ppm	1000ppb	25ppb	for 60 seconds	FT-004
		5ppm	0.1ppm	for 40 seconds	FT-005
Hydrogen fluoride (HF)	3ppm	9ppm	0.1ppm	for 20 seconds	FT-006
Acetic acid (CH ₃ COOH)	10ppm	10ppm	0.25ppm	for 20 seconds	FT-006
Hydrogen bromide (HBr)	3ppm	3ppm	0.05ppm	for 60 seconds	FT-005
Phosgene (COCl ₂)	100ppb	300ppb	5ppb	for 60 seconds	FT-008
Ammonia (NH ₃)	25ppm	1ppm	0.025ppm	for 60 seconds	FT-009
		6ppm	0.1ppm	for 20 seconds	FT-010
Chlorine trifluoride (ClF ₃)	100ppb	500ppb	10ppb	for 60 seconds	FT-006
Tertiary Butyl Phosphine (TBP)	300ppb	500ppb	10ppb	for 90 seconds	FT-001
Tertiary Butyl Arsine (TBA)	50ppb	150ppb	2.5ppb	for 90 seconds	FT-001
VCM (CH ₂ CHCl)	5ppm	15ppm	0.25ppm	for 20 seconds	FT-004
Hydrazine (N ₂ H ₄)	100ppb	400ppb	5ppb	for 120 seconds	FT-010
Formalin (HCHO)	1ppm	3000ppm	50ppm	for 240 seconds	FT-012
		3ppm	0.05ppm	for 300 seconds	FT-011



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