RIKEN KEIKI

For detecting special material gas leaks
and monitoring factory environment

Transportable Gas Detector

Model TP-70D
Model TP-70DG (Type with pyrolyzer heater)



Detection Target Gas List

TP-70D

Detection target gas	Chemical formula	Detection range
Arsine	AsH_3	0 to 0.2 ppm
Disilane	Si_2H_6	0 to 15 ppm
Diborane	B_2H_6	0 to 0.3 ppm
Hydrogen selenide	H_2Se	0 to 0.2 ppm
Phosphine	PH_3	0 to 1 ppm
Germane	GeH_4	0 to 0.8 ppm
Silane	SiH_4	0 to 15 ppm
Ammonia	NH_3	0 to 75 ppm
Hydrogen fluoride	HF	0 to 3 ppm
Carbon monoxide	CO	0 to 75 ppm
Hydrogen sulfide	H_2S	0 to 1 ppm
Hydrogen chloride	HCl	0 to 6 ppm
Chlorine	Cl_2	0 to 1.5 ppm
Hydrogen	H_2	0 to 2,000 ppm
Isopropyl alcohol	IPA	0 to 2,000 ppm
Methanol	CH_3OH	0 to 1,000 ppm
Methane	CH_4	0 to 2.00 vol%
Oxygen	O_2	0 to 25 vol%

*Please contact Riken Keiki for information on o her gases.

TP-70DG

Detection target gas	Chemical formula	Detection range
Nitrogen trifluoride	NF_3	0 to 30 ppm

Features

- New intelligent sensors allow selection of the required detection target gas, ranging from special material gases to toxic gases, combustible gases, and oxygen.
- The large, easy-to-read LCD makes it easy to read off gas concentrations and check the pump operation status.
- Features a flow rate automatic adjustment function to reduce workloads for daily maintenance.
- The compact, transportable size allows connection to a commercial power supply (100 V to 240 V AC ±10 %) for detection anywhere.
- The detection target gas can be switched by replacing the sensor.

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Model TP-70D/TP-70DG

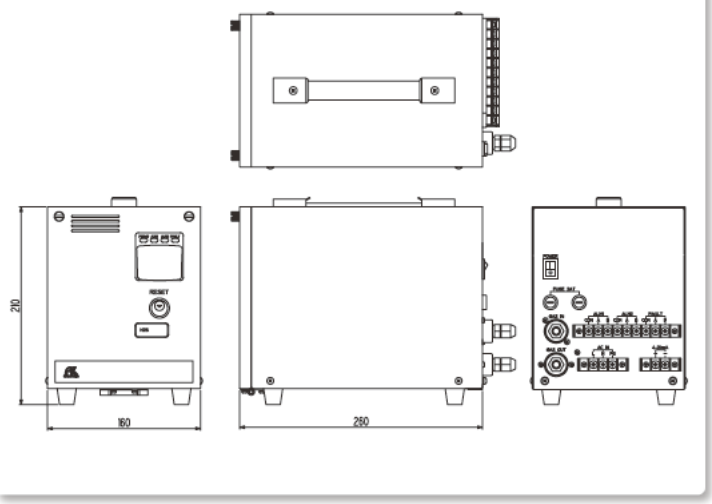
Specifications

Model	TP-70D	TP-70DG
Detection principle	Depends on sensor unit mounted.	Pyrolyzer + Electrochemical type
Detection target gas		NF_3
Detection range	Depends on detection target gas.	0 to 30ppm
Detection method	Pump suction type	
Suction flow rate	0.5 L/min ±10 %	
External output	4 to 20 mA DC (non-insulated/load resistance not exceeding 300 Ω)	
Gas alarm	Two-step alarm (self-latching or auto-reset)	
External output contacts	Gas alarm: One no-voltage contact each for 1st and 2nd alarms, de-energized in normal state (energized in alarm state) or energized in normal state (de-energized in alarm state) Fault alarm: One no-voltage contact, de-energized in normal state (energized in alarm state) or energized in normal state (de-energized in alarm state)	
Self-diagnostic function	Flow rate abnormality, system abnormality, sensor abnormality	Flow rate abnormality, system abnormality, sensor abnormality, pyrolyzer heater abnormality
Operating temperature range	0 °C to 40 °C (no sudden changes)	
Operating humidity range	30 to 70 %RH (no condensation) (May vary depending on sensor unit mounted.)	30 to 70 %RH (no condensation)
Displays	Gas name display/Flow rate display/Mode display	Gas name display/Flow rate display/Mode display/ Pyrolyzer heater connection display
Alarm indications	Gas alarm: Lamp flashing or lit (red)/Intermittent or continuous buzzer Fault alarm: Lamp lit (yellow)/Detail display/Continuous buzzer	
Power supply [Power consumption]	100 V to 240 V AC ±10 %, 50/60 Hz [approx. 12 VA (max. 20 VA) (May vary depending on sensor unit mounted.)]	100 V to 240 V AC ±10 %, 50/60 Hz [approx. 40 VA (max. 45 VA)]
External dimensions	Approx. 160 mm (W) × 210 mm (H) × 260 mm (D) (excluding projections)	
Weight	Approx. 4.3 kg	Approx. 5.4 kg

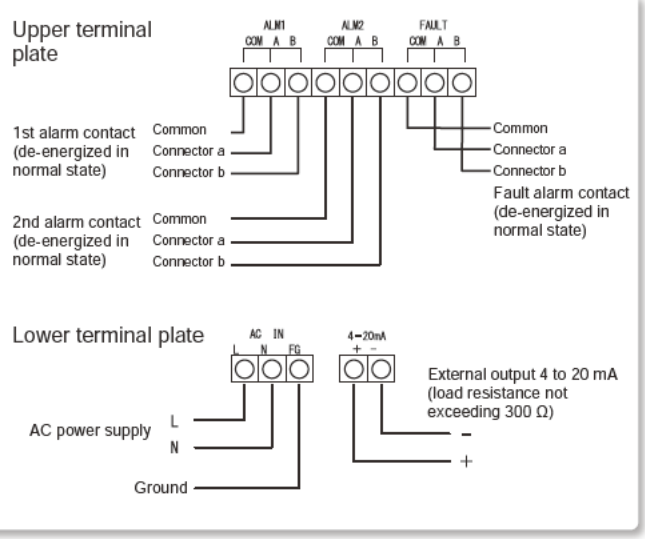
Accessories

· Protective rubber cap · Dust filter · Interference gas removal filter (depending on sensor unit)

External view



Terminal plate diagram



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* The contents described in this catalog are subject to change without notice according to the performance improvement.

RIKEN VIET
GAS DETECTOR TECHNOLOGY CO., LTD
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