



**FOR SOLAR CELL, SEMICONDUCTOR & LCD FACTORIES**

# INTELLIGENT GAS DETECTOR

## MODEL GD-70D series



- Common platform (Main/Sensor/Pump) for all detection methods
- Universal main unit (All sensor types)
- Multifunctional sensor unit (New Intelligent sensor)
- No internal tubing (Main unit) /No coil (Pump)
- Front access/No tool required/Easy replacement of sensor and pump
- Large size LCD (Easily viewable)
- Various communication methods available (4-20mA, NT and PoE)
- Minimal maintenance cost through enhanced troubleshooting firmware functions
- Smallest mounting space
- Simple upgrade from existing units
- Environmentally friendly
- Global standard

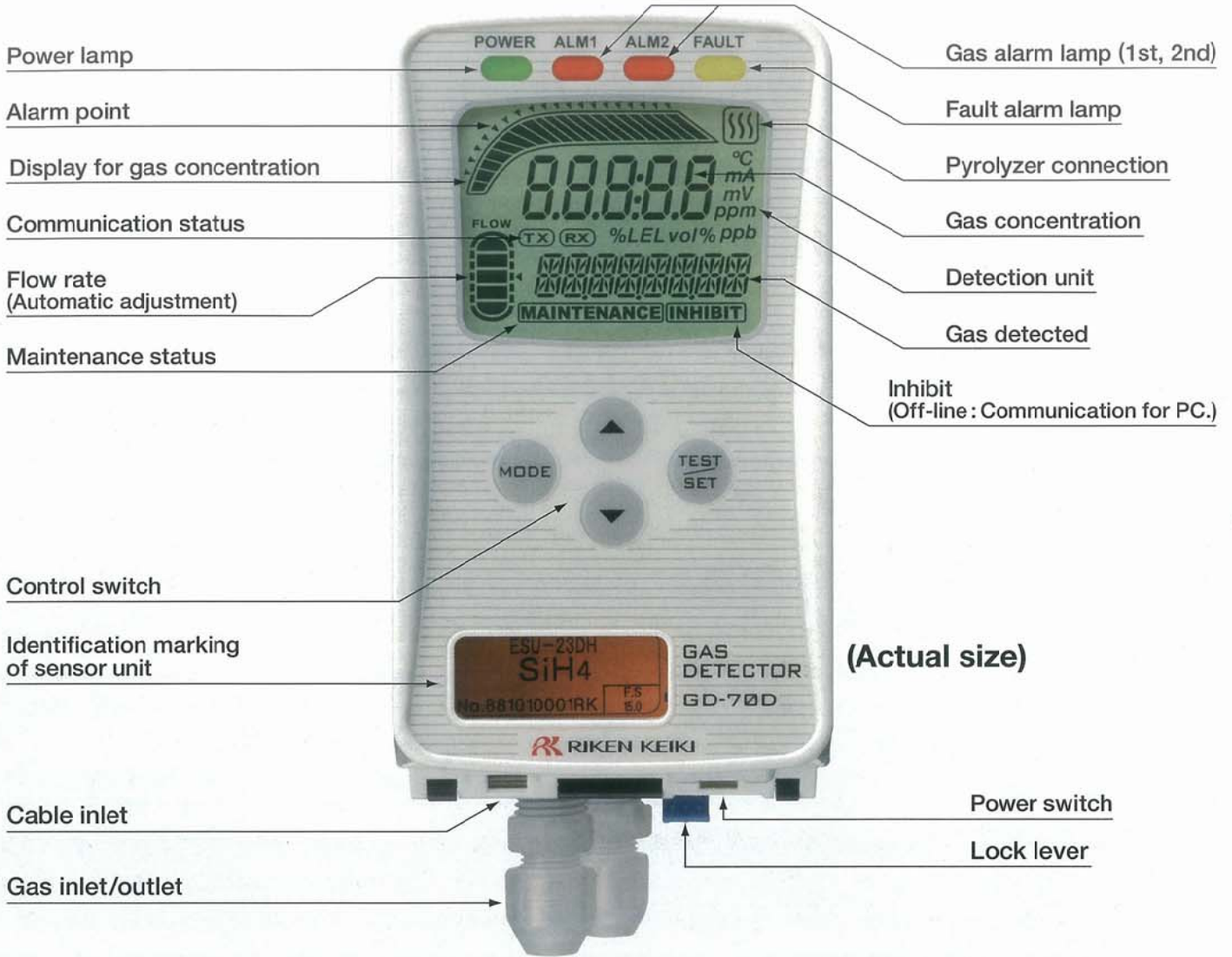


ISO 9001 95QR-007  
ISO 14001 97ER-005  
TOKYO PLANT • OKEGAWA MANUFACTURING  
DIVISION • HAKODATE FACTORY

**RIKEN KEIKI**

# ▶ COMPONENT DESIGNATIONS

## Front view

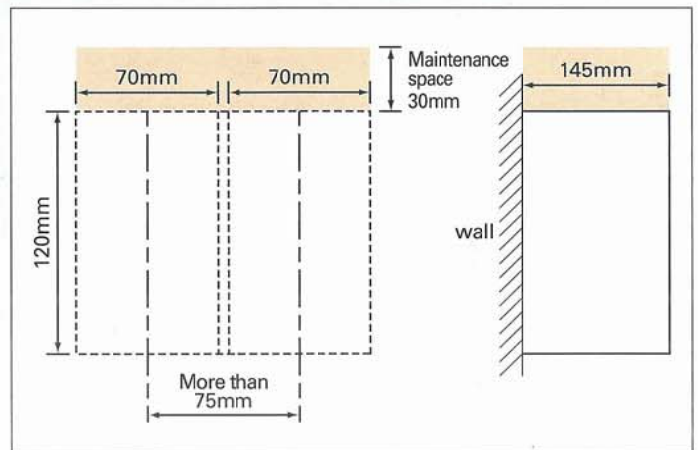


## Front view



# ▶ INSTALLATION SPACE

Installation space can be saved.







## Pyrolyzer unit

Model	PLU-70
Application	NF <sub>3</sub> /TEOS gases detected in air
Usage	Used by connecting to "GD-70D" (Main unit)
Power lamp	LED (Green color) Normal : Light-on Warming-up : Flashing at every 1 sec interval Trouble : Flashing at every 0.2 sec interval
Self-diagnosis function	Pyrolyser unit trouble Fan trouble System trouble
Operating temp. & humidity	0-40°C, 30-70%RH (non-condensing)
Operational Settings	All operational settings are user adjustable through front panel
Power requirements	DC24V±10%, approx. 25W (MAX)
Dimensions	70(W)×120(H)×150(D) mm (2.8"W×4.7"H×5.9"D)
Weight	Approx. 1.2kg (2.6lbs)
Mounting	Wall-mounting base plate by 2 or 3 screws
Sampling Tubing	4×6mm PTFE tubing recommended. PP half union fittings provided as standard accessories
Gland	1.25sq 2 core cable for power supply DC24V (Cable gland optional)

Specifications subject to change without notice.

## Signal converter unit

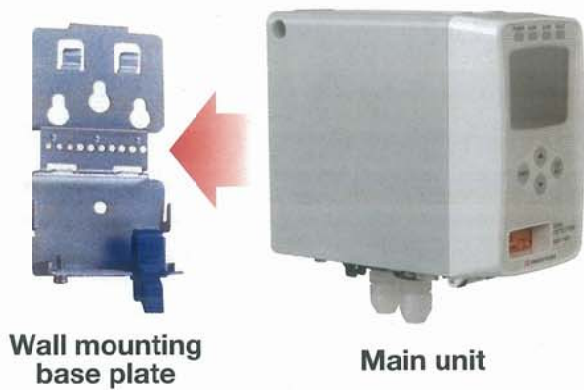
Model	SD-70SC-NT	SD-70SC-ET
Application	For NT net work	For PoE
Display	Large LCD Display (White back light) Gas concentration : Digital & bar chart display Gas detected, Error code, Content of error	
Alarm	1 <sup>st</sup> alarm : Red 2 <sup>nd</sup> alarm : Red Trouble alarm : Yellow	
External output	1 <sup>st</sup> alarm/2 <sup>nd</sup> alarm/Trouble alarm : Each relay contract output	
Self-diagnosis function	Analog line trouble System trouble	
Data logging function	Several types of event history recorded Alarm trend (180sec before/after 1 <sup>st</sup> alarm)	
Operating temp. & humidity	0-40°C, 30-70%RH (non-condensing)	
Operational settings	All operational settings are user adjustable through front panel	
Power requirements	DC24V±10% approx. 1.5W (Max. 4W)	
Dimensions	70(W)×120(H)×150(D) mm (2.8"W×4.7"H×5.9"D)	
Weight	Approx. 0.9kg (2.0lbs)	
Mounting	Wall-mounting base plate by 2 or 3 screws	
Gland	Cable type varies depending on communication method (Cable gland optional)	

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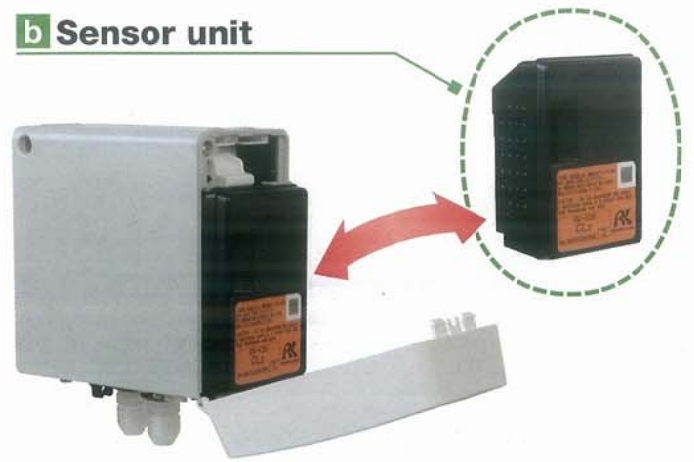


# ▶ NO NEED FOR SPECIAL TOOLS; QUICK PLUG AND PLAY

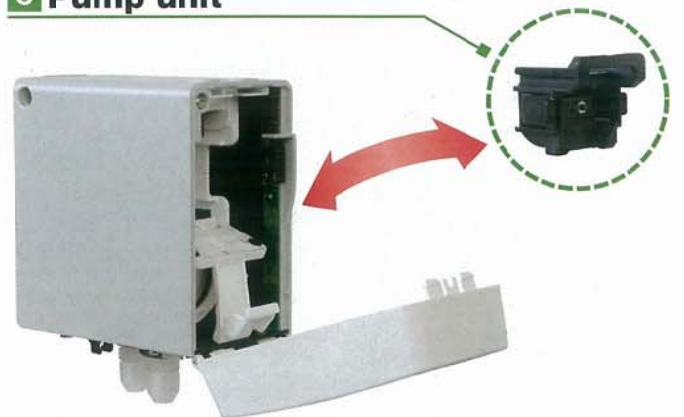
## a Main unit



## b Sensor unit



## c Pump unit



# ▶ SIMPLE UPGRADE FROM EXISTING UNITS VARIOUS COMMUNICATION METHODS AVAILABLE (4-20mA, NT&POE)

## Dimensions for installation

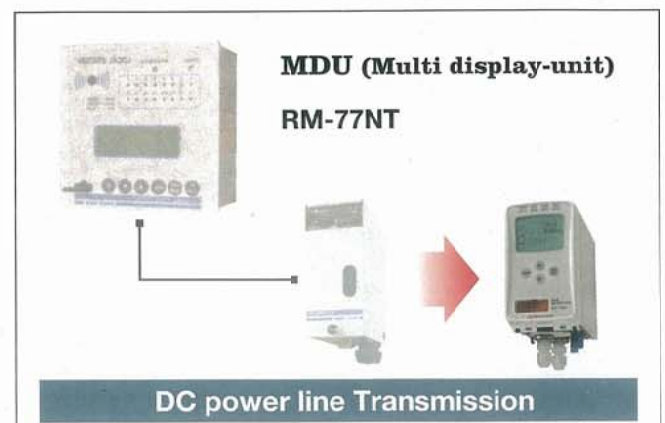
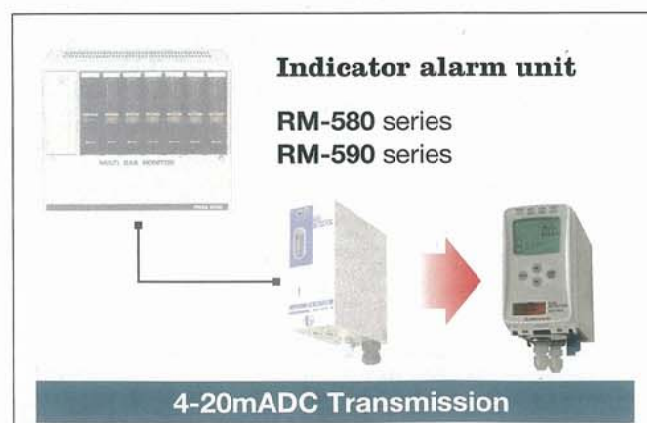
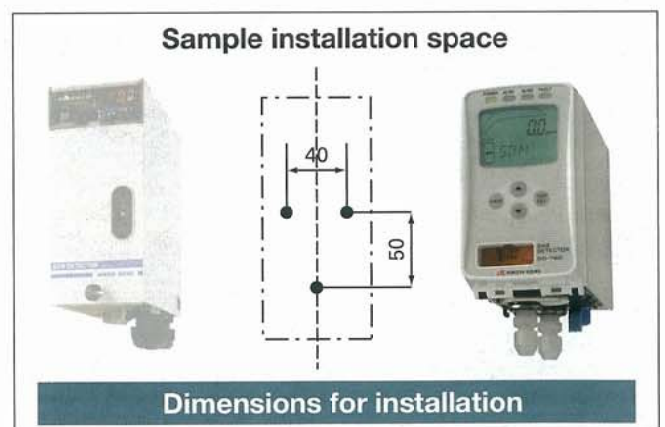
The Installation space for GD-70D is the same as existing units.

## Power requirements

Power requirements for GD-70D is DC24V, same as existing units.

## Cable

The cable for the GD-70D is the same as one used for existing Riken units. You can use the existing cable installed for connecting to the GD-70D.



# GASES DETECTED WITH RIKEN KEIKI's ELECTROCHEMICAL SENSOR UNIT "ESU"

Gases detected		ACGIH TLV-TWA	Detection range*
Ammonia	NH <sub>3</sub>	25ppm	0~75ppm
Antimony Pentachloride	SbCl <sub>5</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Arsenic Pentachloride	AsCl <sub>5</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Arsenic Trichloride	AsCl <sub>3</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Arsenic Pentafluoride	AsF <sub>5</sub>	(HF 2ppm)(C)	HF 0~9ppm
Arsenic Trifluoride	AsF <sub>3</sub>	(HF 2ppm)(C)	HF 0~9ppm
Arsine	AsH <sub>3</sub>	5ppb	0~0.2ppm
Boron Tribromide	BBr <sub>3</sub>	(HBr 2ppm)(C)	HBr 0~6ppm
Boron Trichloride	BCl <sub>3</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Boron Trifluoride	BF <sub>3</sub>	(HF 2ppm)(C)	HF 0~9ppm
Carbon Monoxide	CO	25ppm	0~75ppm, 0~150ppm or 0~200ppm
Chlorine	Cl <sub>2</sub>	0.5ppm	0~1.5ppm
Chlorine Trifluoride	ClF <sub>3</sub>	0.1ppm(C)	0~0.6ppm
Diborane	B <sub>2</sub> H <sub>6</sub>	0.1ppm	0~0.3ppm
Dichlorosilane	SiH <sub>2</sub> Cl <sub>2</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Fluorine	F <sub>2</sub>	1ppm	0~3ppm
Germanium Tetrachloride	GeCl <sub>4</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Hydrogen Bromide	HBr	2ppm(C)	0~6ppm
Hydrogen Chloride	HCl	2ppm(C)	0~6ppm or 0~15ppm
Hydrogen Fluoride	HF	2ppm(C)	0~9ppm
Molybdenum Hexafluoride	MoF <sub>6</sub>	(HF 2ppm)(C)	HF 0~9ppm
Molybdenum Pentachloride	MoCl <sub>5</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Nitric Oxide	NO	25ppm	0~100ppm
Nitrogen Trifluoride	NF <sub>3</sub>	10ppm	0~30ppm
Ozone	O <sub>3</sub>	0.1ppm	0~0.6ppm
Phosphine	PH <sub>3</sub>	0.3ppm	0~1ppm
Phosphorus Oxychloride	POCl <sub>3</sub>	0.1ppm	HCl 0~6ppm or 0~15ppm
Phosphorus Pentachloride	PCl <sub>5</sub>	0.1ppm	HCl 0~6ppm or 0~15ppm
Phosphorus Pentafluoride	PF <sub>5</sub>	(HF 2ppm)(C)	HF 0~9ppm
Phosphorus Trichloride	PCl <sub>3</sub>	0.2ppm	HCl 0~6ppm or 0~15ppm
Silane	SiH <sub>4</sub>	5ppm	0~15ppm
Silicone Tetrachloride	SiCl <sub>4</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Silicone Tetrafluoride	SiF <sub>4</sub>	(HF 2ppm)(C)	HF 0~9ppm
Sulfur Tetrafluoride	SF <sub>4</sub>	(HF 2ppm)(C)	HF 0~9ppm
Tin Tetrachloride	SnCl <sub>4</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Trichlorosilane	SiHCl <sub>3</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Tungsten Hexachloride	WCl <sub>6</sub>	(HCl 2ppm)(C)	HCl 0~6ppm or 0~15ppm
Tungsten Hexafluoride	WF <sub>6</sub>	(HF 2ppm)(C)	HF 0~9ppm

1) For gases and/or detection range not listed above, contact us or our nearest agent.

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