

# For N<sub>2</sub>O gas detection in Semiconductor processing

## Gas detector head

Model GD-70D (RI)



[Sensor unit]

- **Small size**
- **Light weight**
- **Low power consumption**



## SPECIFICATION

Model	GD-70D (RI)
Detection principle	Non-dispersive infrared absorption method
Detectable gas	N <sub>2</sub> O
Gas concentration display	LCD(digital and bar-meter display)
Measuring range	0~500ppm
Detection method	Pump suction method (Flow rate : 0.5L/min ± 10%)
Alarm set point*	50ppm/100ppm(standard setting)
Power indication	POWER lamp lighting(green)
Various indications	Gas/Flow/Mode
Output	Gas concentration signal/Gas alarm contact/Trouble alarm contact
Alarm accuracy (under an identical condition)	Less than ± 30%(against alarm preset point)
Alarm delay time (under an identical condition)	Within 30 seconds(by providing the gas 1.6 times the alarm set point) (excluding delay in the tube and in the communication))
Gas alarm type	Two-level alarm(H-HH)
Gas alarm indication	1st : ALM1 lamp lighting(red) 2nd : ALM2 lamp lighting(red)
Gas alarm action	Auto-recover
Gas alarm contact*	Each no-voltage contact 1a or 1b(contact output for each alarm) Non-exciting at normal(exciting at alarm) or exciting at normal(non-exciting at alarm)
Fault alarm· Self diagnosis	System failure/Sensor failure/Flow failure
Fault alarm indication	FAULT lamp lighting(yellow)/content display
Fault alarm action	Auto-recover
Fault alarm contact*	No-voltage contact 1a or 1b Non-exciting at normal(exciting at alarm) or exciting at normal(non-exciting at alarm)
Contact capacity	AC125V · 0.25A/DC24V · 0.5A(load resistance)
Contact cable	CVV worth cable(1.25mm <sup>2</sup> ) · MAX.6-core
Transmission scheme	Three-wire analog transmission(in common with power supply<power supply, signal, common>) or two-wire analog transmission
Specification of transmission	DC4~20mA(non-isolated · load resistance less than 300Ω)
Transmission cable	CVVS worth of shield cable(1.25mm <sup>2</sup> ) · 3-core or 2-core
Various functions	White backlight/Alarm delay/Suppress/Zero tracking/Span assist/Flow control/Proofreading history/ Alarm trend history/Event history
Power cable	CVV worth of cable (1.25mm <sup>2</sup> ) · 2-core(three-wire analog transmission is in common with transmission cable)
Power supply	DC24V ± 10% Power consumption : Approx.3W(MAX.5W)
Piping port	Rc1/4(PP half union<for O.Dφ6-1t>is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	0~40°C(at a constant condition)
Operating humidity	Below 95%RH(non-condensing)
Structure	Box type · Wall mounting type
Outer dimension	Approx. 70(W) × 120(H) × 145(D)mm(protction excluding)
Weight	Approx. 0.9kg
Color	Body : gray Front door : white

\* Please specify your request when ordering.

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