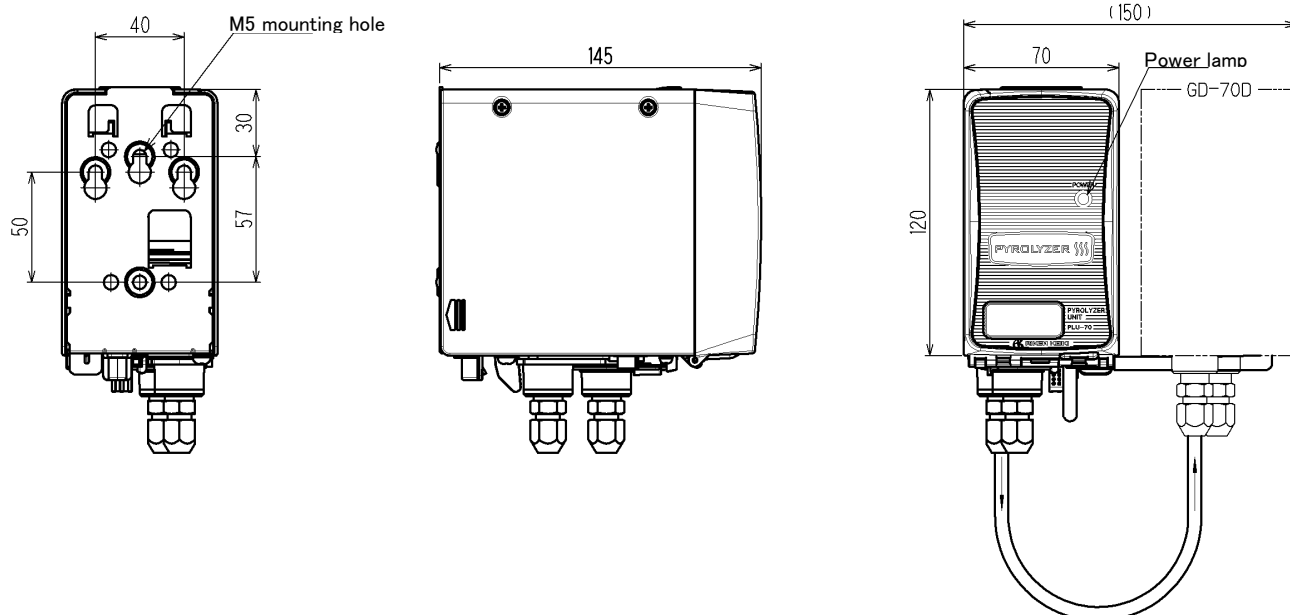


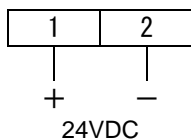
## Pyrolyzer Unit (for GD-70D Series) PLU-70 SPECIFICATION

Model	PLU-70
Power indication	POWER lamp on (green)
Power cable	Cable of CVV, etc. (1.25mm <sup>2</sup> ) - 2-core
Power consumption	24VDC ± 10%
Power consumption	Max. 25W
Tube Connecting Hole	Rc1/4 (O.D. Φ6-1t half-union for Teflon tube <PP> supplied)
Operating temperature	0 - 40°C (non-rapidly-vary)
Operating humidity	30 - 80%RH (non-condensing)
Structure	Box type/Wall mounted type
Outer dimension	Approx. 70 (W) × 120 (H) × 145 (D) mm (projection portions excluded)
Weight	Approx. 0.9kg
Color	Main unit : grey Front door : white

### Outline Drawings



### Terminal Drawings



## **GAS DETECTOR HEAD**

### **GD-70D (ESU+PLU) SPECIFICATION**

Model	GD-70D
Detection principle	Electrochemical method
Detectable gas*1	NF <sub>3</sub> /COS
Gas concentration display	LCD(digital and bar-meter display)
Measuring range*1	NF <sub>3</sub> : 0~30ppm COS : 0~90ppm
Detection method*2	Pump suction method/pyrolysis method
Suction flow	0.5L/min±10%
Alarm preset point*1*3	NF <sub>3</sub> : 10ppm(1st) 【standard】 /20ppm(2nd) 【standard】 COS : 30ppm(1st) 【standard】 /60ppm(2nd) 【standard】
Power indication	POWER lamp lighting(green)
Various indications	Gas/Flow/Mode/pyrolyzer connection
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)	Less than 60sec(when introducing 1.6 times thicker gas than alarm preset point) (without piping delay time)
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*1	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)
Trouble alarm・Self diagnosis	System failure/Sensor failure/Flow failure/Pyrolyzer failure
Trouble alarm indication	FAULT lamp lighting(yellow)/content display
Trouble alarm action	Auto-recover
Trouble alarm contact*1	No-voltage contact 1a or 1b Non-exciting at normal(exciting at alarm) or exciting at normal(non-exciting at alarm)
Contact capacity	DC24V・0.5A(load resistance)
Contact cable	CVV worth cable(1.25sq)・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(1.25sq)・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 (1.25sq)・2-core(three-wire analog transmission is in common with transmission cable)
Power supply※4	DC24V±10%
Power consumption※5	Approx. 1.5W(MAX. 4W, without PLU-70)
Piping port	Rc1/4 (PP half union<for 0. D φ 6-1t> is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	0~40°C (non-rapidly-vary)
Operating humidity	30~70%RH(non-condensing)
Structure	Box type・Wall mounting type
Outer dimension	Approx. 70(W) × 120(H) × 145(D)mm(projection excluding)
Weight	Approx. 0.9kg
Color	Body : gray Front door : white

\*1 Please specify your request when ordering.

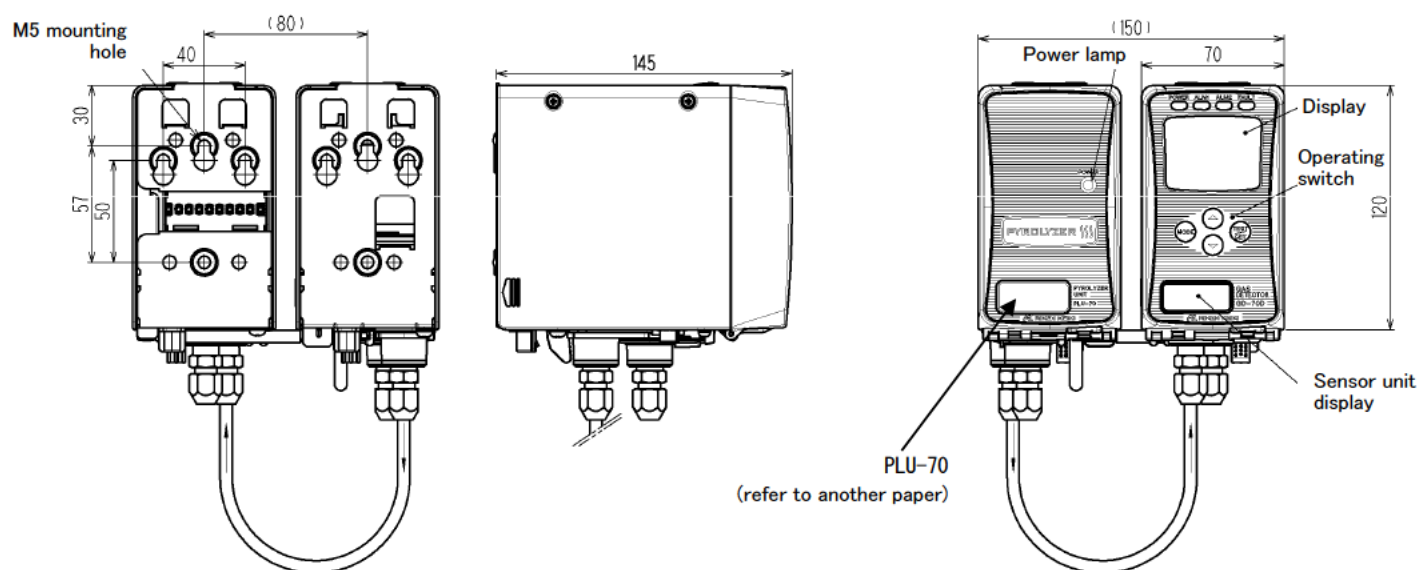
\*2 This detector must be used with the pyrolyzer unit PLU-70.

\*3 Only if installation environmental condition of COS is 20~30°C, alarm preset point can be set to 25ppm.

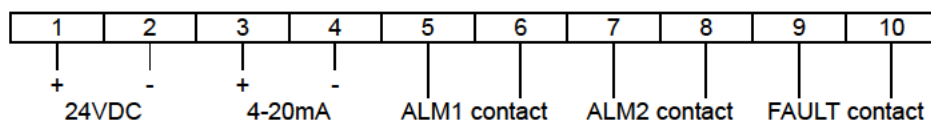
\*4 The pyrolyzer unit PLU-70 needs additional power supply.

\*5 Add max.25W for the pyrolyzer unit PLU-70.

## Outline Drawings



## Terminal Drawings



※For the 3-wire type (4 - 20 mA), the terminal 2 is used for common, and the terminals 2(-) and 3(+) are used to output 4 - 20 mA.

※The pyrolyzer unit PLU-70 needs additional power supply.(for details, refer to PLU-70 specifications.)

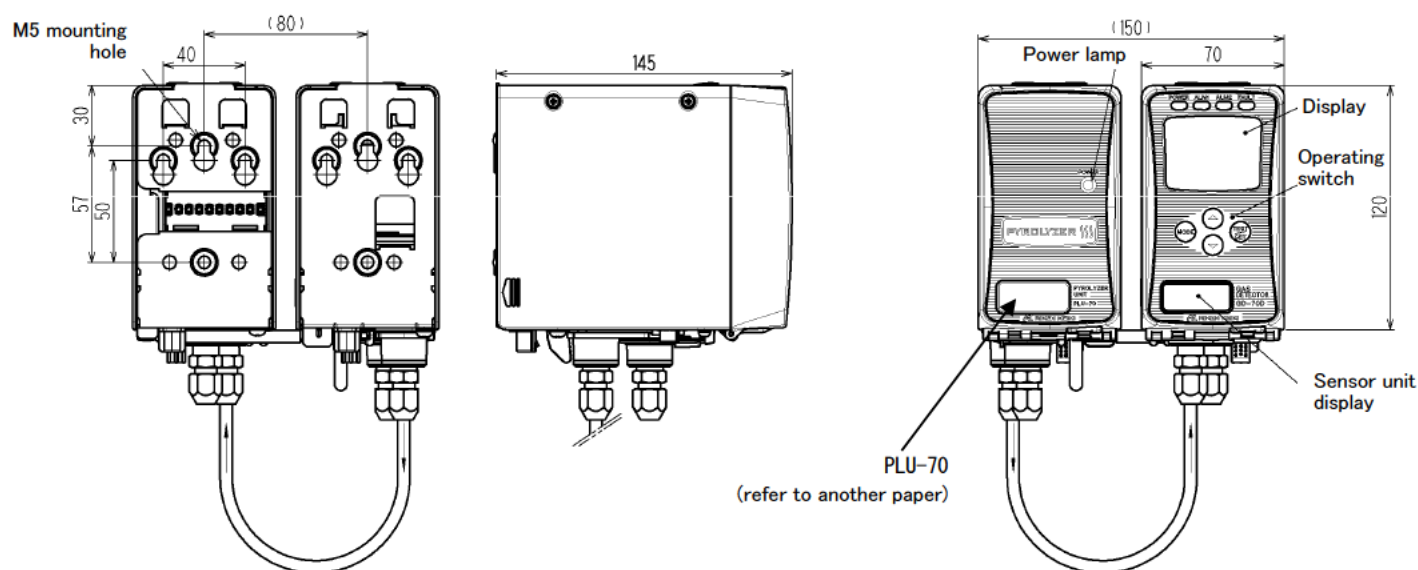
## **GAS DETECTOR HEAD** **GD-70D (SSU+PLU) SPECIFICATION**

Model	GD-70D
Detection principle	Pyrolysis-particle method
Detectable gas*1	Toxic gas
Gas concentration display	LCD(digital and bar-meter display)
Measuring range	Depend on Detectable gas
Detection method*2	Pump suction method/pyrolysis method
Suction flow	0.5L/min±10%
Alarm preset point*1	Depend on Detectable gas
Power indication	POWER lamp lighting(green)
Various indications	Gas/Flow/Mode/pyrolyzer connection
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)	Less than 60sec(when introducing 1.6 times thicker gas than alarm preset point) (without piping delay time)
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*1	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)
Trouble alarm・Self diagnosis	System failure/Sensor failure/Flow failure/Pyrolyzer failure
Trouble alarm indication	FAULT lamp lighting(yellow)/content display
Trouble alarm action	Auto-recover
Trouble alarm contact*1	No-voltage contact 1a or 1b Non-exciting at normal(exciting at alarm) or exciting at normal (non-exciting at alarm)
Contact capacity	DC24V・0.5A(load resistance)
Contact cable	CVV worth cable(1.25sq)・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(1.25sq)・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 (1.25sq)・2-core(three-wire analog transmission is in common with transmission cable)
Power supply	DC24V±10%
Power consumption	Approx. 1.5W(MAX. 4W, without PLU-70)
Piping port	Rc1/4 (PP half union<for O.D φ6-1t> is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	0~40°C(non-rapidly-vary. Depend on Detectable gas.)
Operating humidity	30~80%RH(non-condensing. Depend on Detectable gas.)
Structure	Box type・Wall mounting type
Outer dimension	Approx. 70(W)×120(H)×145(D)mm(projection excluding)
Weight	Approx. 0.9kg
Color	Body : gray Front door : white

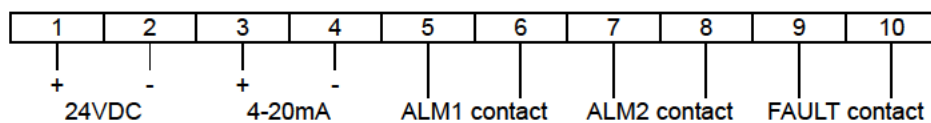
\*1 Please specify your request when ordering.

\*2 This detector must be used with the pyrolyzer unit PLU-70.

## Outline Drawings



## Terminal Drawings



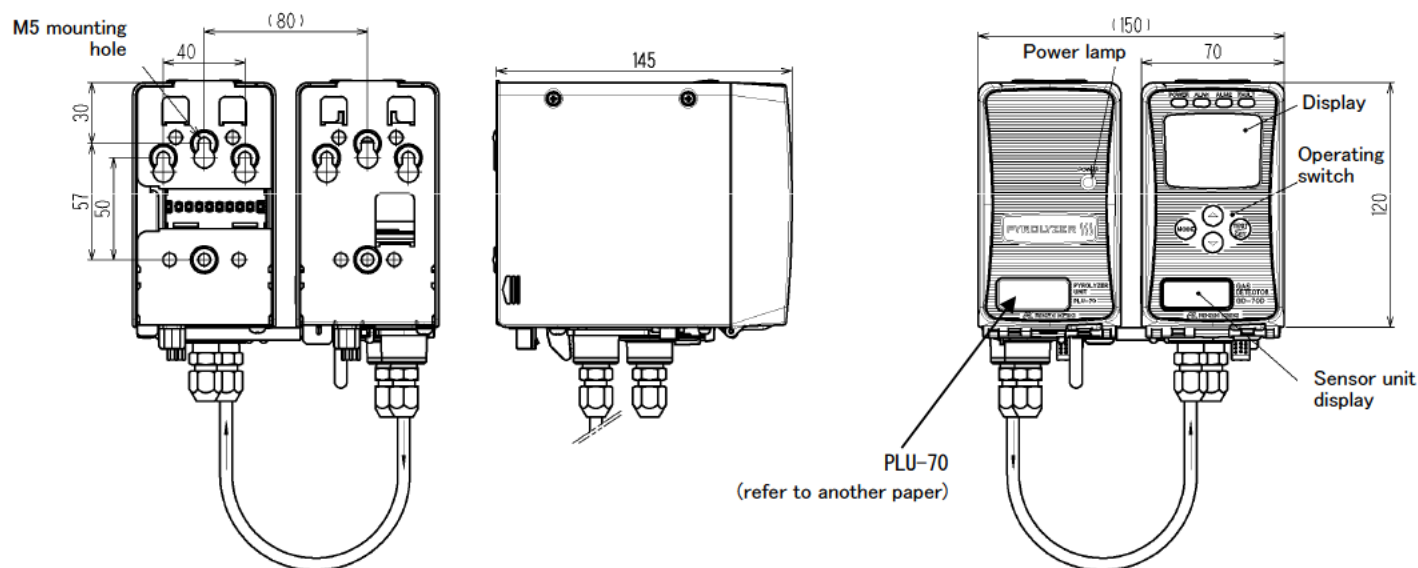
※For the 3-wire type (4 - 20 mA), the terminal 2 is used for common, and the terminals 2(-) and 3(+) are used to output 4 - 20 mA.

## **GAS DETECTOR HEAD** **GD-70D-EA (ESU+PLU) SPECIFICATION**

Model	GD-70D-EA
Detection principle	Electrochemical method
Detectable gas*1	NF <sub>3</sub> /COS
Gas concentration display	Character LCD (Digital and Bar Meter Display)
Measuring range*1	NF <sub>3</sub> : 0~30ppm COS : 0~90ppm
Detection method*2	Pump suction method/pyrolysis method
Suction flow	0.5L/min±10%
Alarm preset point*1*3	NF <sub>3</sub> : 10ppm(1st) <b>【standard】</b> /20ppm(2nd) <b>【standard】</b> COS : 30ppm(1st) <b>【standard】</b> /60ppm(2nd) <b>【standard】</b>
Power indication	POWER lamp on(green)
Various indications	Gas name display/flow rate indicator/mode display/communication status display/pyrolyzer abnormalities
Alarm accuracy (under an identical condition)	Less than ±30%(against alarm preset point)
Alarm-delay time (under an identical condition)	Less than 60sec (by providing the gas 1.6 times the alarm setpoint) (excluding delay in the tube and in the communication)
Gas alarm type	Two-level alarm(H-HH)
Gas alarm indication	1st : ALM1 lamp on(red) 2nd : ALM2 lamp on(red)
Gas alarm action	Non latching (auto-reset)
Gas alarm contact*1	No-voltage contact 1a or 1b (2 step independent) De-energized (energized at an alarm state) or energized (de-energized at an alarm state)
Trouble alarm・Self diagnosis	System abnormalities/sensor abnormalities/flow rate abnormalities/ communication abnormalities/pyrolyzer abnormalities
Trouble alarm indication	FAULT lamp on(yellow)/detail display
Trouble alarm action	Non latching (auto-reset)
Trouble alarm contact*1	No-voltage contact 1a or 1b De-energized (energized at an alarm) or energized (de-energized at an alarm)
Contact capacity	24 VDC, 0.5 A (resistance load)
Contact cable	Cable of CVV, etc. (1.25 mm <sup>2</sup> ) - max. 6-core
Transmission scheme	Digital transmission: Ethernet(10BASE-T/100BASE-TX) Analog transmission: 3-wire type analog transmission (Common cable for power and signal <Power, Signal, Common>) or 2-wire type analog transmission
Transmission cable	Digital transmission: Ethernet cable(category 5 or higher) Analog transmission: Shielded cable of CVVS, etc. (1.25 mm <sup>2</sup> )-3-core or 2-core
Various functions	White backlight/alarm delay/suppression/zero follower/sensitivity correction/flow control/ Calibration history/alarm trend history/event history
Power cable	Cable of CVV, etc. (1.25mm <sup>2</sup> ) - 2-core (common with the digital transmission cable when PoE connection is used/common with the analog transmission cable when 3-wire analog connection is used)
Power supply*4	24 VDC ±10% or PoE connection
Power consumption*5	24 VDC : Approx. 3W (Max. approx. 5W, without PLU-70) PoE : Approx. 4.5W (Max. approx. 7W, without PLU-70)
Piping port	Rc1/4 (O.D Φ 6-1t polytetrafluoroethylene (PTFE) tubing, with half-union <PP> for the tubing)
Initial clear	Approx. 25sec
Operating temperature	0 - 40°C(at a constant condition)
Operating humidity	30 - 70%RH(non-condensing)
Structure	Box type/Wall mounted type
Outer dimension	Approx. 70(W) × 120(H) × 145(D)mm(projection portions excluded)
Weight	Approx. 0.9kg
Color	Body : gray Front door : white

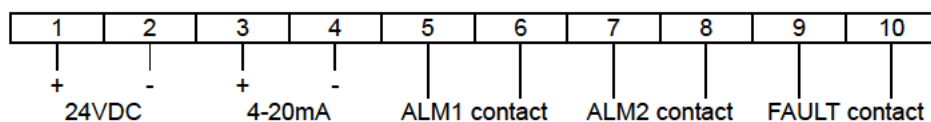
- \*1 Please specify your request when ordering.
- \*2 This detector must be used with the pyrolyzer unit PLU-70.
- \*3 Only if installation environmental condition of COS is 20~30°C, alarm preset point can be set to 25ppm.
- \*4 The pyrolyzer unit PLU-70 needs additional power supply.
- \*5 Add max. 25W for the pyrolyzer unit PLU-70.

### Outline Drawings



- \* RJ-45 connector for Ethernet cable connection is on the bottom of the main unit.

### Terminal Drawings



- \* For PoE connection, the terminals 1 and 2 are disabled. (Connection prohibited. Supply from the RJ-45 connector.)
- \* The pyrolyzer unit PLU-70 needs additional power supply. (for details, refer to PLU-70 specifications.)

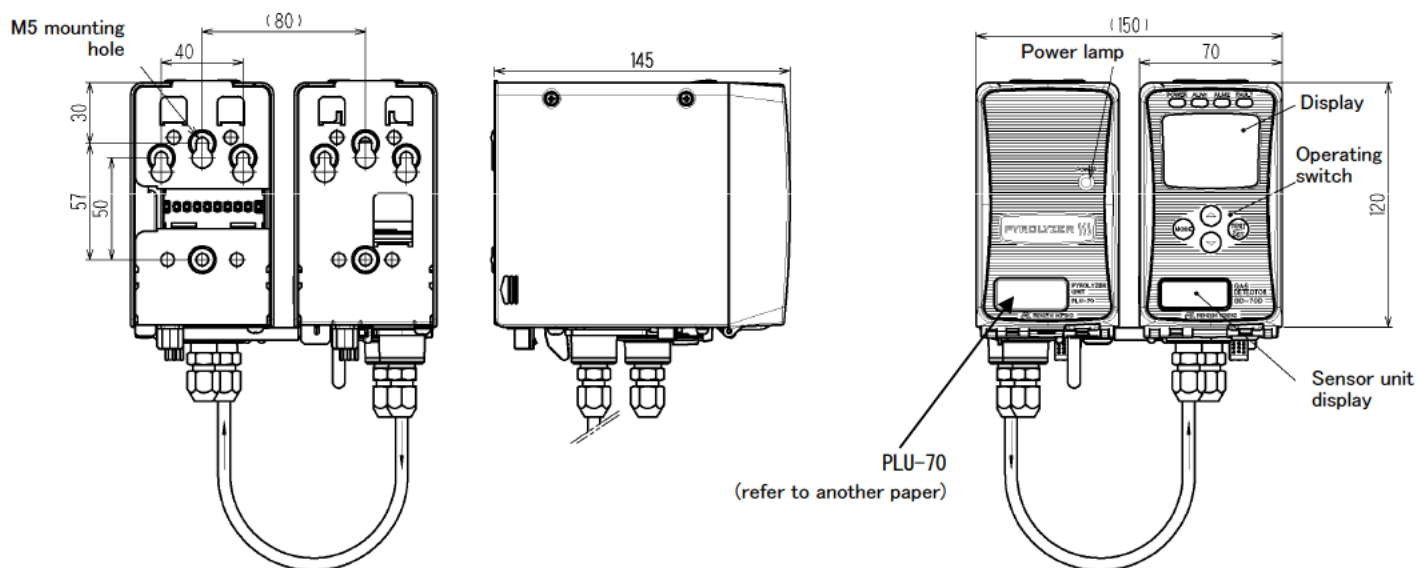
## GAS DETECTOR HEAD GD-70D-EA (SSU+PLU) SPECIFICATION

Model	GD-70D-EA
Detection principle	Pyrolysis-particle method
Detectable gas* <sup>1</sup>	Toxic gas
Gas concentration display	Character LCD (Digital and Bar Meter Display)
Measuring range* <sup>1</sup>	Depend on Detectable gas
Detection method* <sup>2</sup>	Pump suction method/pyrolysis method
Suction flow	0.5L/min±10%
Alarm preset point* <sup>1*3</sup>	Depend on Detectable gas
Power indication	POWER lamp on(green)
Various indications	Gas name display/flow rate indicator/mode display/communication status display/pyrolyzer abnormalities
Alarm accuracy (under an identical condition)	Less than ±30%(against alarm preset point)
Alarm-delay time (under an identical condition)	Less than 60sec (by providing the gas 1.6 times the alarm setpoint) (excluding delay in the tube and in the communication)
Gas alarm type	Two-level alarm(H-HH)
Gas alarm indication	1st : ALM1 lamp on(red) 2nd : ALM2 lamp on(red)
Gas alarm action	Non latching (auto-reset)
Gas alarm contact* <sup>1</sup>	No-voltage contact 1a or 1b (2 step independent) De-energized (energized at an alarm state) or energized (de-energized at an alarm state)
Trouble alarm・Self diagnosis	System abnormalities/sensor abnormalities/flow rate abnormalities/ communication abnormalities/pyrolyzer abnormalities
Trouble alarm indication	FAULT lamp on(yellow)/detail display
Trouble alarm action	Non latching (auto-reset)
Trouble alarm contact* <sup>1</sup>	No-voltage contact 1a or 1b De-energized (energized at an alarm) or energized (de-energized at an alarm)
Contact capacity	24 VDC, 0.5 A (resistance load)
Contact cable	Cable of CVV, etc. (1.25 mm <sup>2</sup> ) - max. 6-core
Transmission scheme	Digital transmission: Ethernet(10BASE-T/100BASE-TX) Analog transmission: 3-wire type analog transmission (Common cable for power and signal <Power, Signal, Common>) or 2-wire type analog transmission
Transmission cable	Digital transmission: Ethernet cable(category 5 or higher) Analog transmission: Shielded cable of CVVS, etc. (1.25 mm <sup>2</sup> )-3-core or 2-core
Various functions	White backlight/alarm delay/suppression/zero follower/sensitivity correction/flow control/ Calibration history/alarm trend history/event history
Power cable	Cable of CVV, etc. (1.25mm <sup>2</sup> ) - 2-core (common with the digital transmission cable when PoE connection is used/common with the analog transmission cable when 3-wire analog connection is used)
Power supply* <sup>4</sup>	24 VDC ±10% or PoE connection
Power consumption* <sup>5</sup>	24 VDC : Approx. 3W (Max. approx. 5W, without PLU-70) PoE : Approx. 4.5W (Max. approx. 7W, without PLU-70)
Piping port	Rc1/4 (O.D Φ 6-1t polytetrafluoroethylene (PTFE) tubing, with half-union <PP> for the tubing)
Initial clear	Approx. 25sec
Operating temperature	0 - 40°C(at a constant condition)
Operating humidity	30 - 80%RH(non-condensing. Depend on Detectable gas.)
Structure	Box type/Wall mounted type
Outer dimension	Approx. 70(W) × 120(H) × 145(D)mm(projection portions excluded)
Weight	Approx. 0.9kg
Color	Body : gray Front door : white



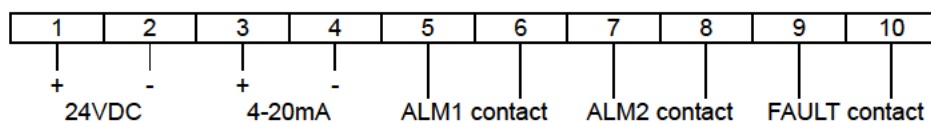
- \*1 Please specify your request when ordering.
- \*2 This detector must be used with the pyrolyzer unit PLU-70.
- \*3 Only if installation environmental condition of COS is 20~30°C, alarm preset point can be set to 25ppm.
- \*4 The pyrolyzer unit PLU-70 needs additional power supply.
- \*5 Add max. 25W for the pyrolyzer unit PLU-70.

### Outline Drawings



- \* RJ-45 connector for Ethernet cable connection is on the bottom of the main unit.

### Terminal Drawings



- \* For PoE connection, the terminals 1 and 2 are disabled. (Connection prohibited. Supply from the RJ-45 connector.)
- \* The pyrolyzer unit PLU-70 needs additional power supply. (for details, refer to PLU-70 specifications.)