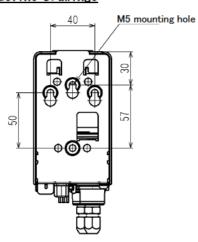
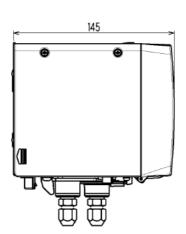
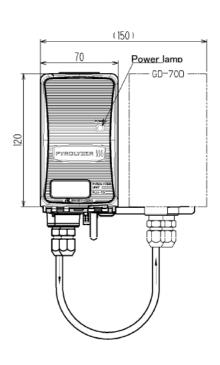
Pyrolyzer Unit(for GD-70D Series) PLU-70 SPECIFICATION

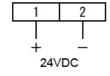
| Model | PLU-70 |
|-----------------------|---|
| Power indication | POWER lamp on (green) |
| Power cable | Cable of CVV, etc. (1.25mm ²) - 2-core |
| Power consumption | 24VDC±10% |
| Power consumption | Max. 25W |
| Tube Connecting Hole | Rc1/4 (0.D Φ6-1t half-union for Teflon tube <pp>supplied)</pp> |
| 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) \times 120 (H) \times 145 (D) mm (projection potions excluded) |
| Weight | Approx. 0. 9kg |
| Color | Main unit: grey |
| | Front door : white |

Outline Drawings





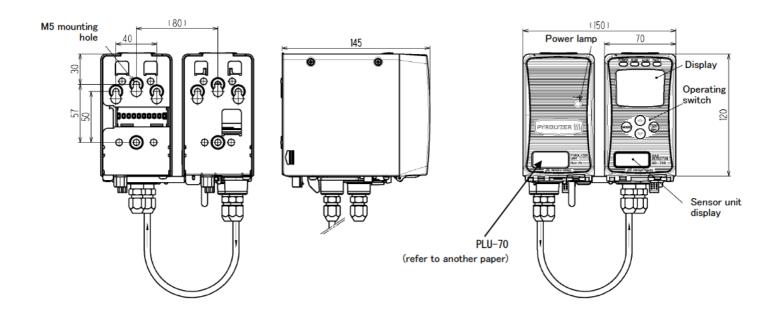


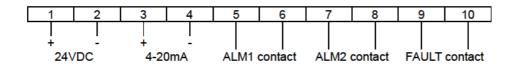


GAS DETECTOR HEAD GD-70D (ESU+PLU) SPECIFICATION

| Detection principle | Electrochemical method |
|--------------------------------|--|
| Detectable gas%1 | NF3/COS |
| Gas concentration display | LCD(digital and bar-meter display) |
| Measuring range%1 | NF3 : 0~30ppm |
| medeat mg range/kr | COS : 0~90ppm |
| Detection method%2 | Pump suction method/pyrolysis method |
| Suction flow | 0.5L/min±10% |
| Alarm preset point%1%3 | NF3: 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 | Less than ±30%(against alarm preset point) |
| (under an identical condition) | |
| Alarm-delay time | Less than 60sec (when introducing 1.6 times thicker gas than alarm preset |
| (under an identical condition) | 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 |
| T 11 1 2 15 11 | 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 | AC125V · O. 25A/DC24V · O. 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< td=""></power<> |
| Transmitos for soricine | supply, signal, common>) or two-wire analog transmission |
| Specification of | $DC4 \sim 20 \text{mA} \text{ (non-isolated \cdot load resistance less than } 300 \Omega)$ |
| transmission | |
| 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 $20\sim30^{\circ}$ C, alarm preset point can be set to 25ppm.
- X4 The pyrolyzer unit PLU-70 needs additional power supply.
- 3.5 Add max. 25W for the pyrolyzer unit PLU-70.



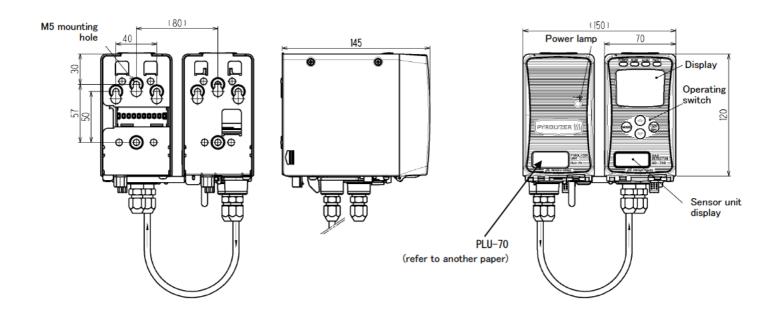


- %The pyrolyzer unit PLU-70 needs additional power supply.(for details, refer to PLU-70 specifications.)

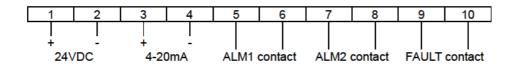
GAS DETECTOR HEAD GD-70D (SSU+PLU) SPECIFICATION

| Detection principle | Pyrolysis-particle method |
|---|--|
| Detectable gas | Toxic gas |
| 3 | 7 |
| Gas concentration display | LCD (digital and bar-meter display) |
| Measuring range | Depend on Detectable gas |
| Detection method | Pump suction method/pyrolysis method |
| Suction flow | 0.5L/min±10% |
| Alarm preset point | 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 | Less than ±30%(against alarm preset point) |
| (under an identical condition) | Loss then 60acc (when introducing 1.6 times thicker resulting alore proceed |
| 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 | 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 | 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(1.25sq) • MAX.6-core |
| Transmission scheme | Three-wire analog transmission(in common with power supply <power< td=""></power<> |
| | supply, signal, common>) or two-wire analog transmission |
| Specification of | DC4 \sim 20mA(non-isolated · load resistance less than 300 Ω) |
| transmission | |
| 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 0. D ϕ 6-1t 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) \times 120 (H) \times 145 (D) mm (projection excluding) |
| Weight | Approx. 0. 9kg |
| Color | Body: gray |
| | Front door: white |
| NATE: Astronomy to social a | ith the complement to DIU 70 |

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



Terminal Drawings

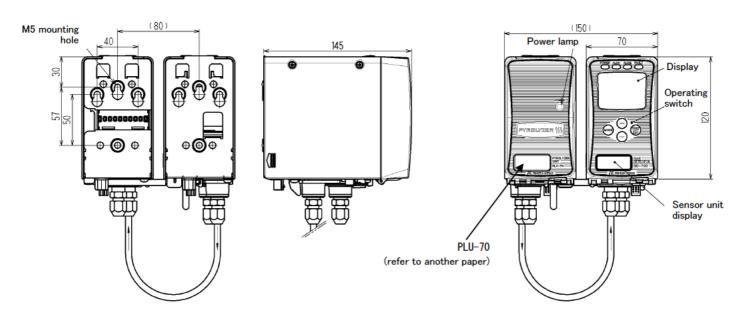


※For the 3-wire type (4 - 20 mA), the terminal 2 is used for common, and the terminals 2(-) and 3(+) are used to output 4 - 20 mA.

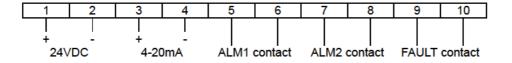
GAS DETECTOR HEAD GD-70D-EA (ESU+PLU) SPECIFICATION

| Mode I | GD-70D-EA |
|---|--|
| Detection principle | Electrochemical method |
| Detectable gas*1 | NF3/COS |
| Gas concentration display | Character LCD (Digital and Bar Meter Display) |
| Measuring range*1 | NF3: 0~30ppm COS: 0~90ppm |
| Detection method*2 | Pump suction method/pyrolysis method |
| Suction flow | 0. 5L/min±10% |
| Alarm preset point*1*3 | NF3: 10ppm(1st) [standard] /20ppm(2nd) [standard] |
| · | COS: 30ppm(1st) [standard] /60ppm(2nd) [standard] |
| Power indication | POWER lamp on (green) |
| Various indications | Gas name display/flow rate indicator/mode display/communication status |
| | display/pyrolyzer abnormalities |
| Alarm accuracy | Less than ±30%(against alarm preset point) |
| (under an identical condition) | Lass then 60ses the manifolding the gas 1.6 times the slave setucint |
| 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/ |
| Trouble arailii octi uragnosis | 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 |
| 0 | alarm) |
| Contact capacity Contact cable | 125 VAC, 0.25 A/24 VDC, 0.5 A (resistance load) Cable of CVV, etc. (1.25 mm²) - max. 6-core |
| Transmission scheme | Digital transmission: Ethernet(10BASE-T/100BASE-TX) |
| Transmission scheme | 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 mm²)-3-core or |
| | 2-core |
| Various functions | White backlight/alarm delay/suppression/zero follower/sensitivity |
| | correction/flow control/ Calibration history/alarm trend history/event |
| Power cable | history Cable of CVV, etc. (1.25mm²) - 2-core (common with the digital |
| TOWER GABIE | 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 (0.D Φ 6-1t polytetrafluoroethylene (PTFE) tubing, with |
| | half-union <pp> for the tubing)</pp> |
| 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) \times 120 (H) \times 145 (D) mm (projection portions excluded) |
| Weight | Approx. 0. 9kg |
| Color | Body: gray Front door: white |
| | THOME GOOD : WILLE |

- *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 $20 \sim 30^{\circ}$ 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.



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

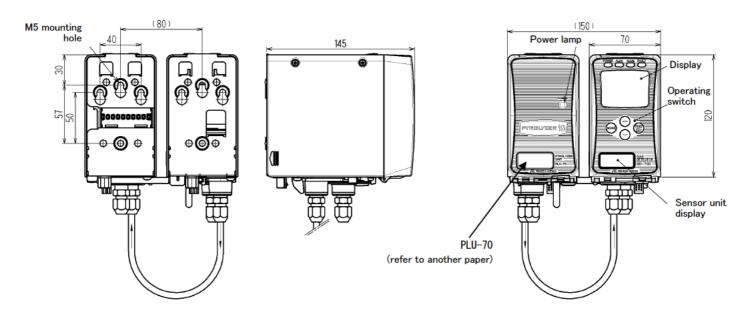


- * For PoE connection, the terminals 1 and 2 are disabled. (Connection prohibited. Supply from the RJ-45 connector.)
- * The pyrolyzer unit PLU-70 needs additional power supply. (for details, refer to PLU-70 specifications.)

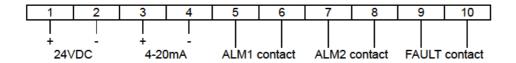
GAS DETECTOR HEAD GD-70D-EA (SSU+PLU) SPECIFICATION

| Model | GD-70D-EA |
|---|--|
| Detection principle | Pyrolysis-particle method |
| Detectable gas*1 | Toxic gas |
| Gas concentration display | Character LCD (Digital and Bar Meter Display) |
| Measuring range*1 | |
| Detection method*2 | Depend on Detectable gas |
| | Pump suction method/pyrolysis method |
| Suction flow | 0.5L/min±10% |
| Alarm preset point*1 | 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 | Less than 60sec (by providing the gas 1.6 times the alarm setpoint) |
| (under an identical condition) | (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 | 125 VAC, 0.25 A/24 VDC, 0.5 A (resistance load) |
| Contact cable | Cable of CVV, etc. (1.25 mm ²) - 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, common="" signal,="">)</power,> |
| | 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 mm²)-3-core or |
| Vaniana funationa | 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. (1.25mm²) - 2-core (common with the digital |
| Tower dable | transmission cable when PoE connection is used/common with the analog |
| | transmission cable when 3-wire analog connection is used) |
| Power supply*3 | 24 VDC ±10% or PoE connection |
| Power consumption*4 | 24 VDC: Approx. 3W (Max. approx. 5W, without PLU-70) |
| | PoE: Approx. 4. 5W (Max. approx. 7W, without PLU-70) |
| Piping port | $Rc1/4$ (0.D Φ 6-1t polytetrafluoroethylene (PTFE) tubing, with |
| | half-union <pp> for the tubing)</pp> |
| 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) \times 120 (H) \times 145 (D) mm (projection portions excluded) |
| Weight | Approx. 0. 9kg |
| Color | Body: gray |
| | Front door: white |
| I . | |

- *1 Please specify your request when ordering.
- *2 This detector must be used with the pyrolyzer unit PLU-70.
- *3 The pyrolyzer unit PLU-70 needs additional power supply.
- *4 Add max. 25W for the pyrolyzer unit PLU-70.



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



- * 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.)