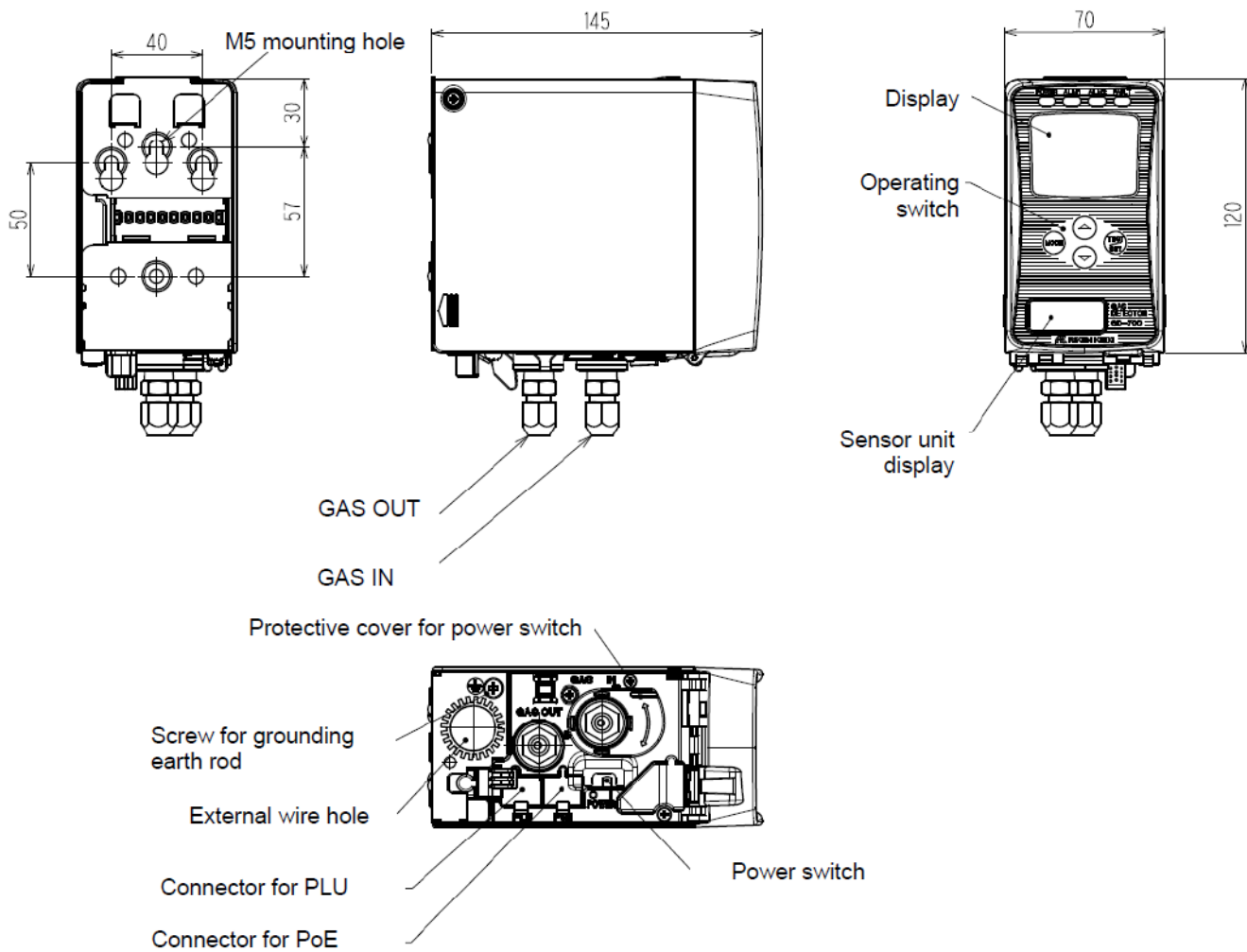


GAS DETECTOR HEAD **GD-70D-EA (ESU) SPECIFICATION**

Model	GD-70D-EA
Detection principle	Electrochemical method
Detectable gas*	Toxic gas
Gas concentration display	Character LCD (Digital and Bar Meter Display)
Measuring range*	Depend on Detectable gas
Detection method	Pump suction method
Suction flow	0.5L/min \pm 10%
Alarm preset point*	Depend on Detectable gas
Power indication	POWER lamp on(green)
Various indicators	Gas name display/flow rate indicator/mode display/communication status display
Alarm accuracy (under an identical condition)	Less than \pm 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*	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
Trouble alarm indication	FAULT lamp on(yellow)/detail display
Trouble alarm action	Non latching (auto-reset)
Trouble alarm contact*	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 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, 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 ²)-3-core or 2-core
Various functions	White backlight/alarm delay/suppression/zero follower/flow control/ Calibration history/alarm trend history/event history
Power cable	Cable of CVV, etc. (1.25mm ²) - 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	24 VDC \pm 10% or PoE connection
Power consumption	24 VDC : Approx. 3W(Max. approx. 5W) PoE : Approx. 4.5W(Max. approx. 7W)
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. It may differ according to mounted sensor.)
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

* Please specify your request when ordering.

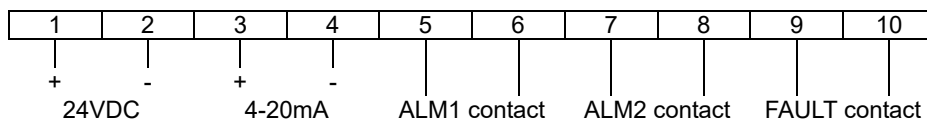
Outline Drawings



(Unit: mm)

* 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.)

GAS DETECTOR HEAD GD-70D-EA (ESU - Anoxia alarm) SPECIFICATION

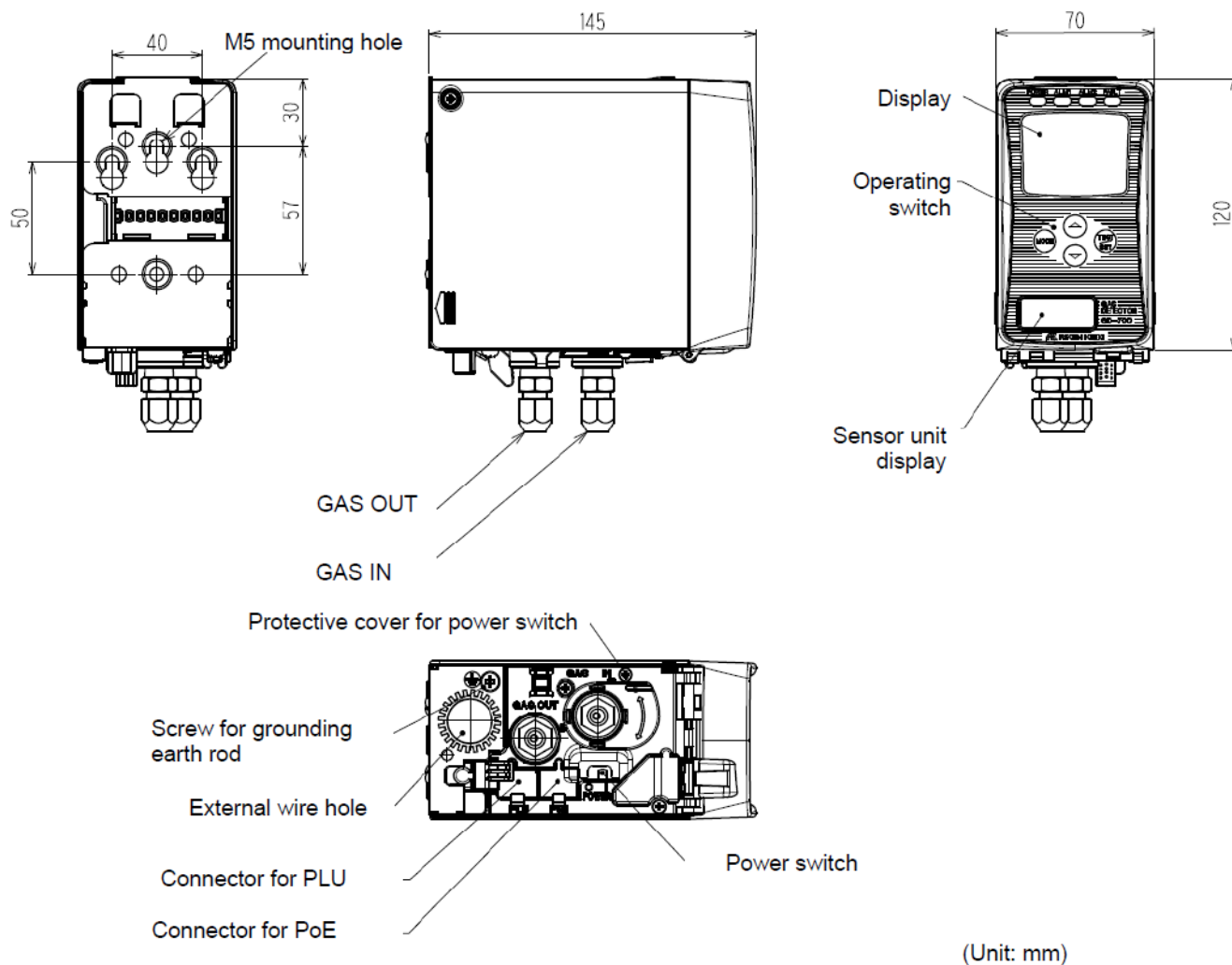
Model	GD-70D-EA
Detection principle	Electrochemical method
Detectable gas	O ₂
Gas concentration display	Character LCD (Digital and Bar Meter Display)
Measuring range	0 - 25vol%
Detection method	Pump suction method
Suction flow	0.5L/min±10%
Alarm preset point* ¹	18vol%(1st<L>)/18vol%(2nd<LL>) 【Standard】
Power indication	POWER lamp on(green)
Various indications	Gas name display/flow rate indicator/mode display/communication status display
Indicate accuracy* ² (under an identical condition)	Less than ±0.7vol%
Accuracy of Alarm setpoint* ²	Difference between Alarm setpoint and indicated value of warning alarm are zero.
Response time* ² (under an identical condition)	Less than 30sec(T90) (excluding delay in the tube and in the communication)
Alarm-delay time* ² (under an identical condition)	By anoxia alarm(Alarm preset point : 18vol%), less than 5sec(when introducing 10 - 11vol% gas) (excluding delay in the tube and in the communication)
Gas alarm type	Two-level alarm(L-LL)
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
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 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, 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 ²)-3-core or 2-core
Various functions	White backlight/alarm delay/suppression/zero follower/flow control/ Calibration history/alarm trend history/event history
Power cable	Cable of CVV, etc. (1.25mm ²) - 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	24 VDC ±10% or PoE connection
Power consumption	24 VDC : Approx. 3W (Max. approx. 5W) PoE : Approx. 4.5W (Max. approx. 7W)
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	-10°C - 40°C(at a constant condition)
Operating humidity	6 - 88%RH (non-condensing)
Structure	Box type/Wall mounted type

Outer dimension	Approx. 70 (W) × 120 (H) × 145 (D) mm (projection portions excluded)
Weight	Approx. 0.9 kg
Color	Body : gray Front door : white

* 1 Please specify your request when ordering.

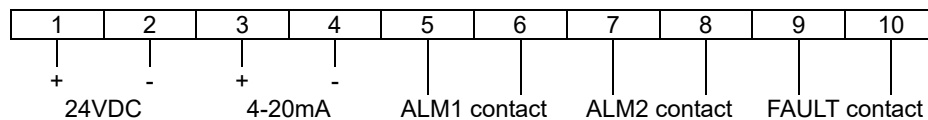
* 2 In conformity to JIS T8201 2010 (Oxygen deficiency indicator).

Outline Drawings



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

Terminal Drawings



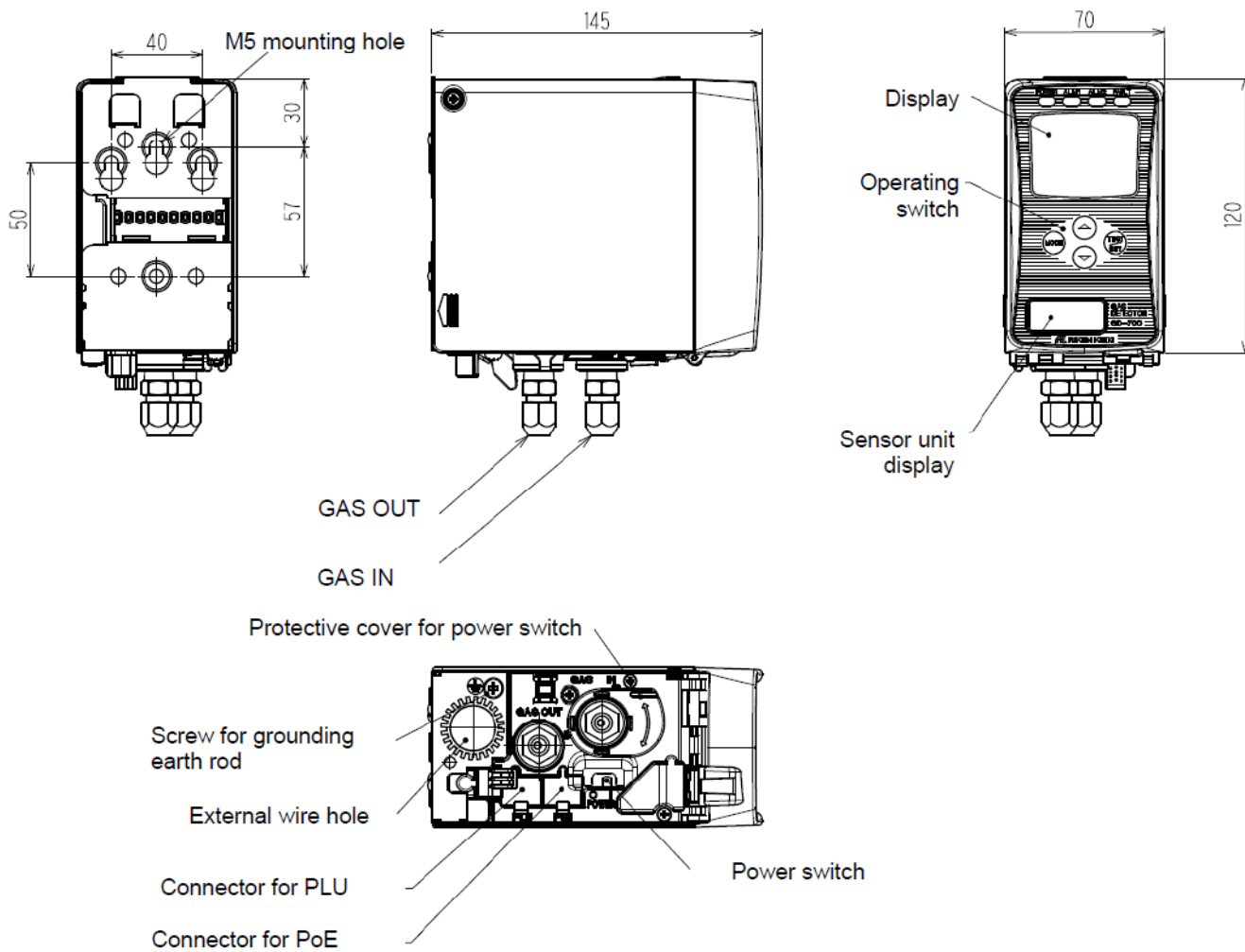
* For PoE connection, the terminals 1 and 2 are disabled. (Connection prohibited. Supply from the RJ-45 connector.)

GAS DETECTOR HEAD **GD-70D-EA (SGU) SPECIFICATION**

Model	GD-70D-EA
Detection principle	Semi-conductor method
Detectable gas*	Combustible gas/Toxic gas
Gas concentration display	Character LCD (Digital and Bar Meter Display)
Measuring range*	Depend on Detectable gas
Detection method	Pump suction method
Suction flow	0.5L/min \pm 10%
Alarm preset point*	Depend on Detectable gas
Power indication	POWER lamp on(green)
Various indications	Gas name display/flow rate indicator/mode display/communication status display
Alarm accuracy* (under an identical condition)	Combustible gas : Less than \pm 25%(against alarm preset point) Toxic gas : Less than \pm 30%(against alarm preset point)
Alarm-delay time* (under an identical condition)	Less than 30sec or 60sec (by providing the gas 1.6 times the alarm setpoint) (Depends on Detectable gas, 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*	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
Trouble alarm indication	FAULT lamp on(yellow)/detail display
Trouble alarm action	Non latching (auto-reset)
Trouble alarm contact*	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 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, 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 ²)-3-core or 2-core
Various functions	White backlight/alarm delay/suppression/zero follower/flow control/ Calibration history/alarm trend history/event history
Power cable	Cable of CVV, etc. (1.25mm ²) - 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	24 VDC \pm 10% or PoE connection
Power consumption	24 VDC : Approx. 4W (Max. approx. 6W) PoE : Approx. 5.5W (Max. approx. 7W)
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	Less than 95%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

* Please specify your request when ordering.

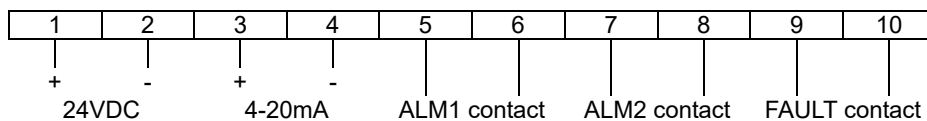
Outline Drawings



(Unit: mm)

* 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.)

GAS DETECTOR HEAD GD-70D-EA (OSU - Anoxia alarm) SPECIFICATION

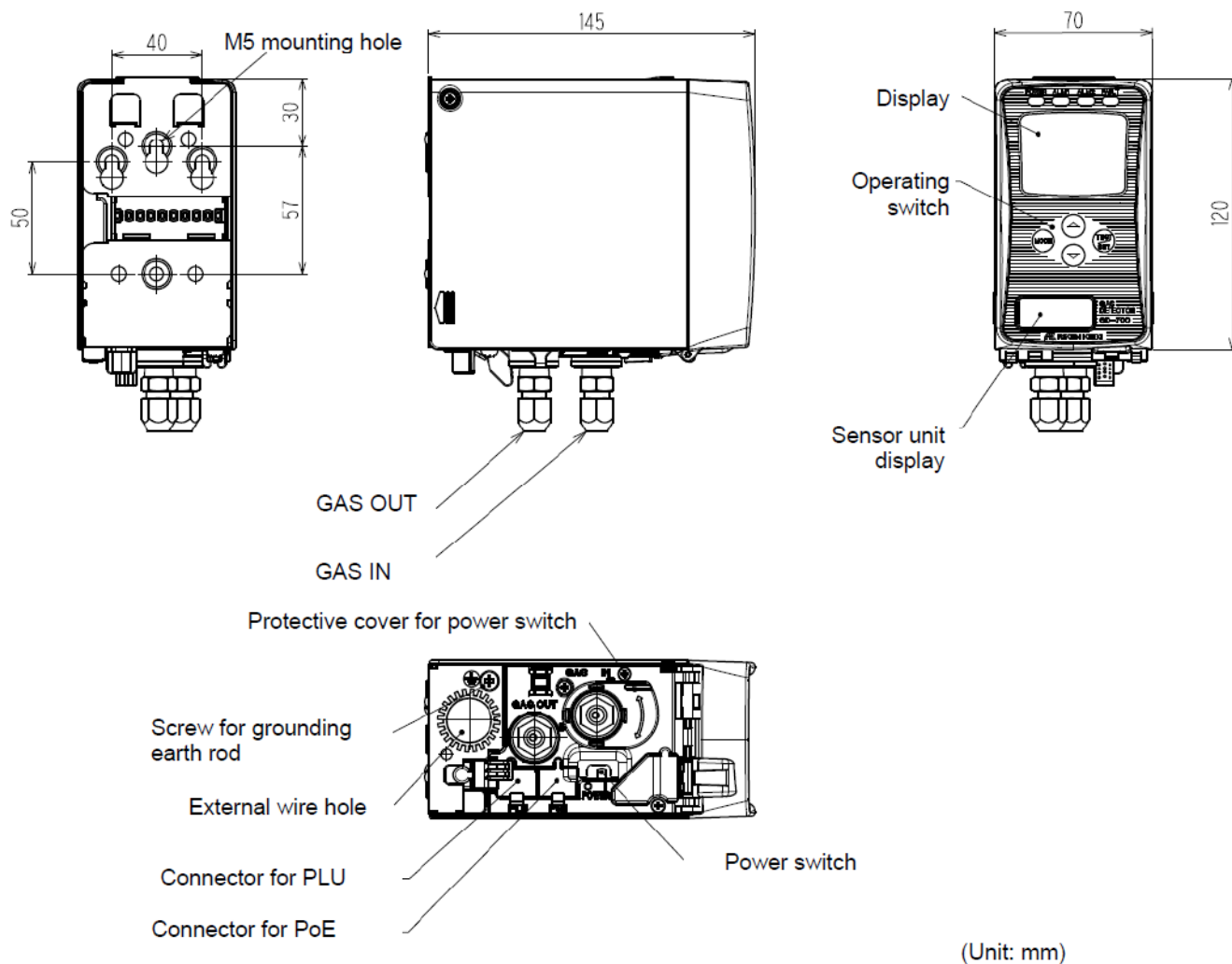
Model	GD-70D-EA
Detection principle	Galvanic cell method
Detectable gas	O ₂
Gas concentration display	Character LCD (Digital and Bar Meter Display)
Measuring range	0 - 25vol%
Detection method	Pump suction method
Suction flow	0.5L/min±10%
Alarm preset point* ¹	18vol%(1st<L>)/18vol%(2nd<LL>) 【Standard】
Power indication	POWER lamp on(green)
Various indications	Gas name display/flow rate indicator/mode display/communication status display
Indicate accuracy* ² (under an identical condition)	Less than ±0.7vol%
Accuracy of Alarm setpoint* ²	Difference between Alarm setpoint and indicated value of warning alarm are zero.
Response time* ² (under an identical condition)	Less than 30sec(T90) (excluding delay in the tube and in the communication)
Alarm-delay time* ² (under an identical condition)	By anoxia alarm(Alarm preset point : 18vol%), less than 5sec(when introducing 10 - 11vol% gas) (excluding delay in the tube and in the communication)
Gas alarm type	Two-level alarm(L-LL or L-H)
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
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 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, 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 ²)-3-core or 2-core
Various functions	White backlight/alarm delay/suppression/zero follower/flow control/ Calibration history/alarm trend history/event history
Power cable	Cable of CVV, etc. (1.25mm ²) - 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	24 VDC ±10% or PoE connection
Power consumption	24 VDC : Approx. 3W (Max. approx. 5W) PoE : Approx. 4.5W (Max. approx. 7W)
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	Less than 95%RH(non-condensing)
Structure	Box type/Wall mounted type

Outer dimension	Approx. 70 (W) × 120 (H) × 145 (D) mm (projection portions excluded)
Weight	Approx. 0.9 kg
Color	Body : gray Front door : white

* 1 Please specify your request when ordering.

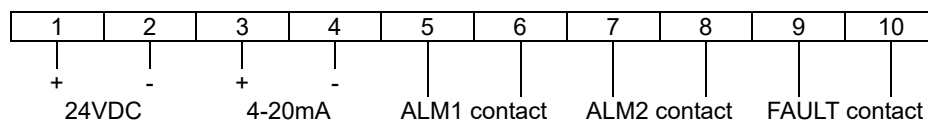
* 2 In conformity to JIS T8201 2010 (Oxygen deficiency indicator).

Outline Drawings



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

Terminal Drawings



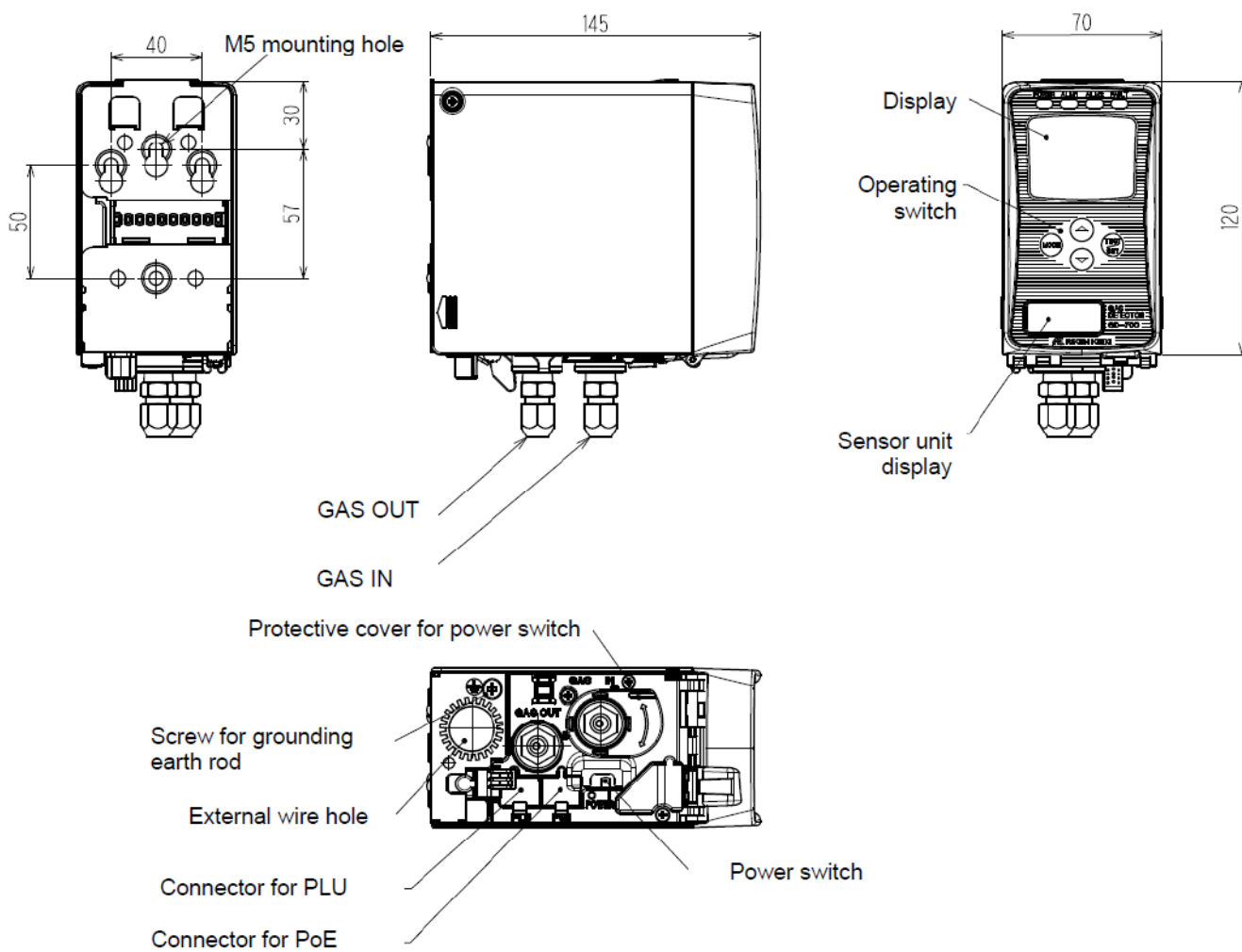
* For PoE connection, the terminals 1 and 2 are disabled. (Connection prohibited. Supply from the RJ-45 connector.)

GAS DETECTOR HEAD **GD-70D-EA (NCU) SPECIFICATION**

Model	GD-70D-EA
Detection principle	New ceramic catalytic method
Detectable gas*	Combustible gas
Gas concentration display	Character LCD (Digital and Bar Meter Display)
Measuring range*	Depend on Detectable gas
Detection method	Pump suction method
Suction flow	0.5L/min \pm 10%
Alarm preset point*	Depend on Detectable gas
Power indication	POWER lamp on(green)
Various indications	Gas name display/flow rate indicator/mode display/communication status display
Alarm accuracy (under an identical condition)	Less than \pm 25%(against alarm preset point)
Alarm-delay time (under an identical condition)	Less than 30sec (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*	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
Trouble alarm indication	FAULT lamp on(yellow)/detail display
Trouble alarm action	Non latching (auto-reset)
Trouble alarm contact*	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 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, 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 ²)-3-core or 2-core
Various functions	White backlight/alarm delay/suppression/zero follower/flow control/ Calibration history/alarm trend history/event history
Power cable	Cable of CVV, etc. (1.25mm ²) - 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	24 VDC \pm 10% or PoE connection
Power consumption	24 VDC: Approx. 4.5W (Max. approx. 6.5W) PoE: Approx. 5.5W (Max. approx. 8.5W)
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	Less than 95%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

* Please specify your request when ordering.

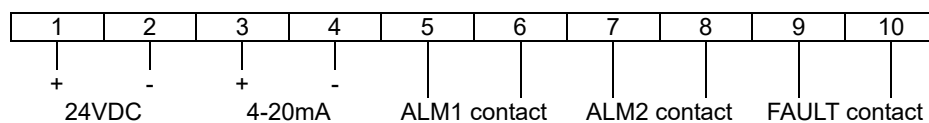
Outline Drawings



(Unit: mm)

* 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.)

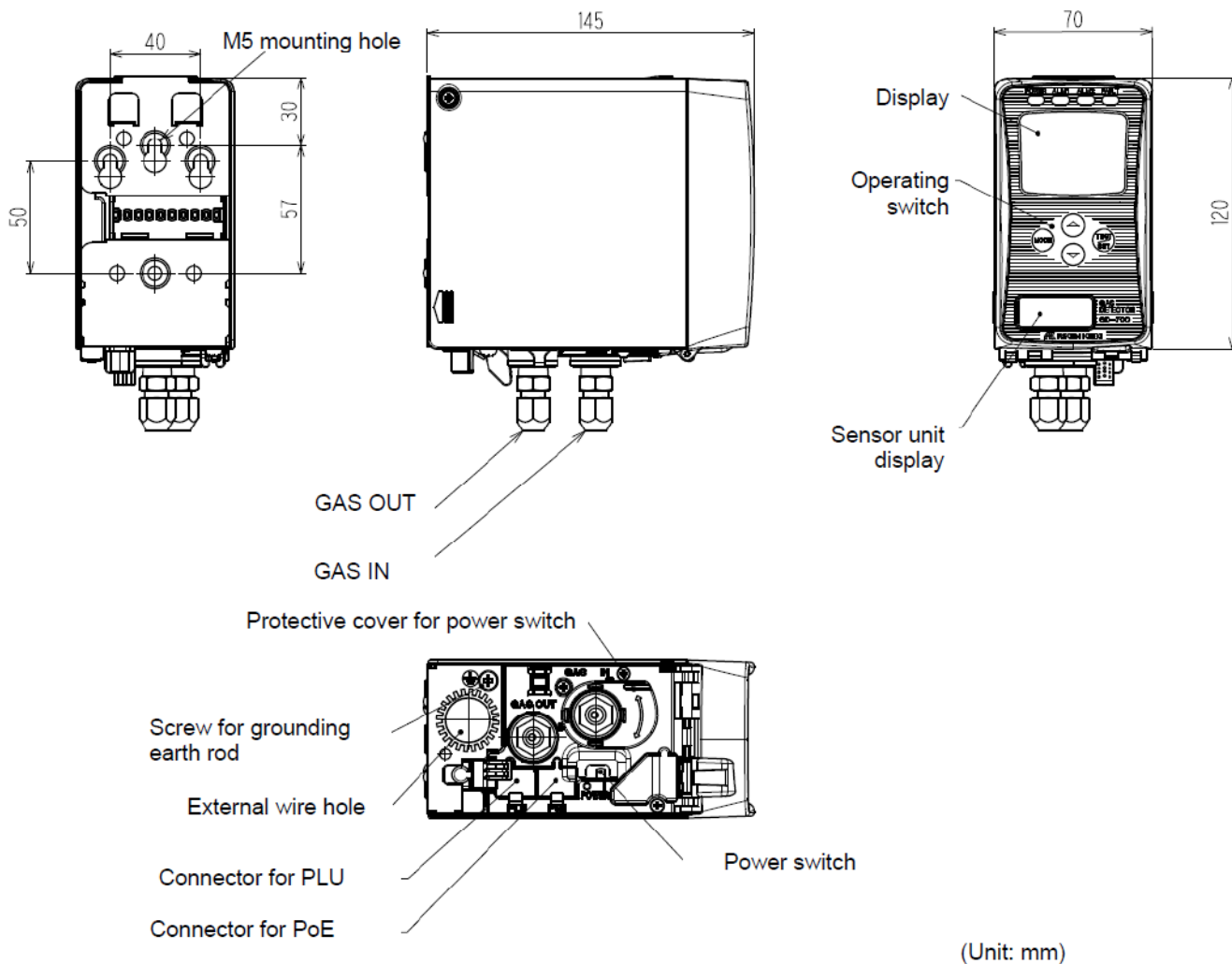
GAS DETECTOR HEAD

GD-70D-EA (SHU) SPECIFICATION

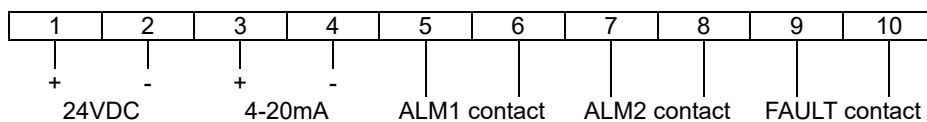
Model	GD-70D-EA
Detection principle	Hot wire semiconductor method
Detectable gas	H ₂
Gas concentration display	LCD(digital and bar-meter display)
Measuring range	0-2000ppm
Detection method	Pump suction method
Suction flow	0.5L/min±10%
Alarm preset point*	1st : 500ppm 2nd : 1000ppm [Standard setting]
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)	Less than 30sec(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
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	DC24V・0.5A(load resistance)
Contact cable	CVV worth cable(1.25mm ²)・MAX.6-core
Transmission scheme	Digital transmission:Ethernet Analog transmission:Three-wire analog transmission(in common with power supply<power supply,signal,common>) or two-wire analog transmission
Specification of transmission	Digital transmission:Ethernet Analog transmission:DC4-20mA(non-isolated・load resistance less than 300Ω)
Transmission cable	Digital transmission:Ethernet cable(category 5 or more) Analog transmission:Shielded cable of CVVS, etc. (1.25mm ²) - 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 ²)・2-core(three-wire analog transmission is in common with transmission cable)
Power supply	DC24V±10% orPoE
Power consumption	DC24V : Approx. 4.5W (MAX. 6.5W) PoE : Approx. 5.5W (MAX. 8W)
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	Below 95%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

* Please specify your request when ordering.

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.

If power supply by PoE is performed, the terminal 1(+) and 2(-) cannot be used.