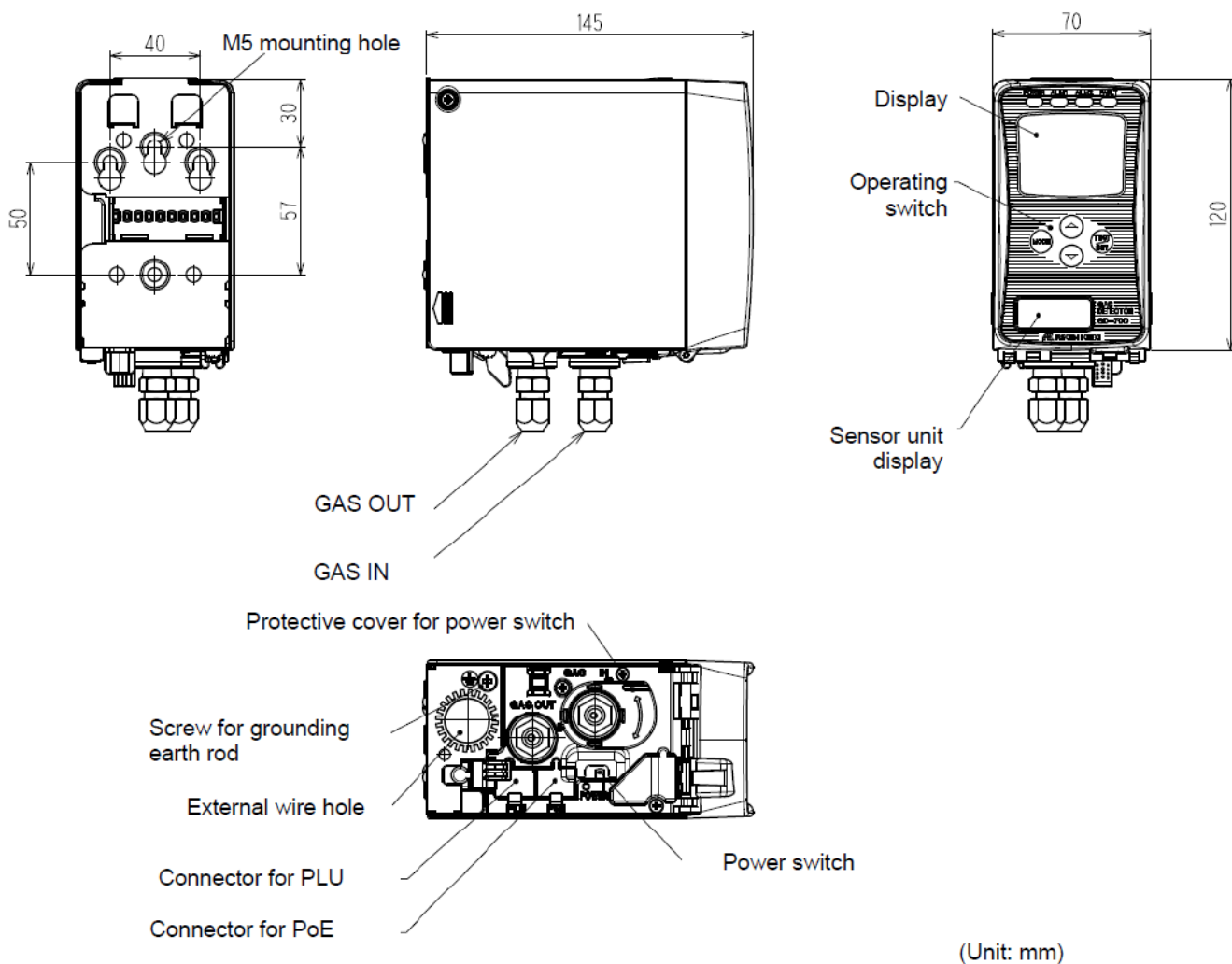


GAS DETECTOR HEAD **GD-70D (ESU) SPECIFICATION**

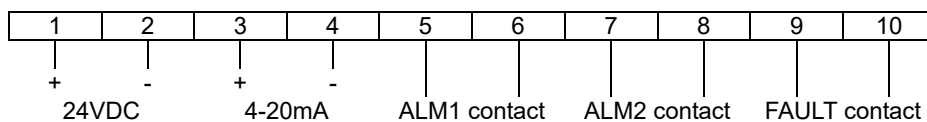
Model	GD-70D
Detection principle	Electrochemical method
Detectable gas*	Toxic gas
Gas concentration display	LCD(digital and bar-meter display)
Measuring range*	Depend on Detectable gas
Detection method	Pump suction method
Suction flow	0.5L/min±10%
Alarm preset point	Depend on Detectable gas
Power indication	POWER lamp lighting(green)
Various indications	Gas/Flow/Mode
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*	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(1.25sq)・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)
Piping port	Rc1/4 (PP half union<for 0. D φ6-1t>is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	0~40°C(non-rapidly-vary. It may differ according to mounted sensor.)
Operating humidity	30~70%RH(non-condensing. It may differ according to mounted sensor.)
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.

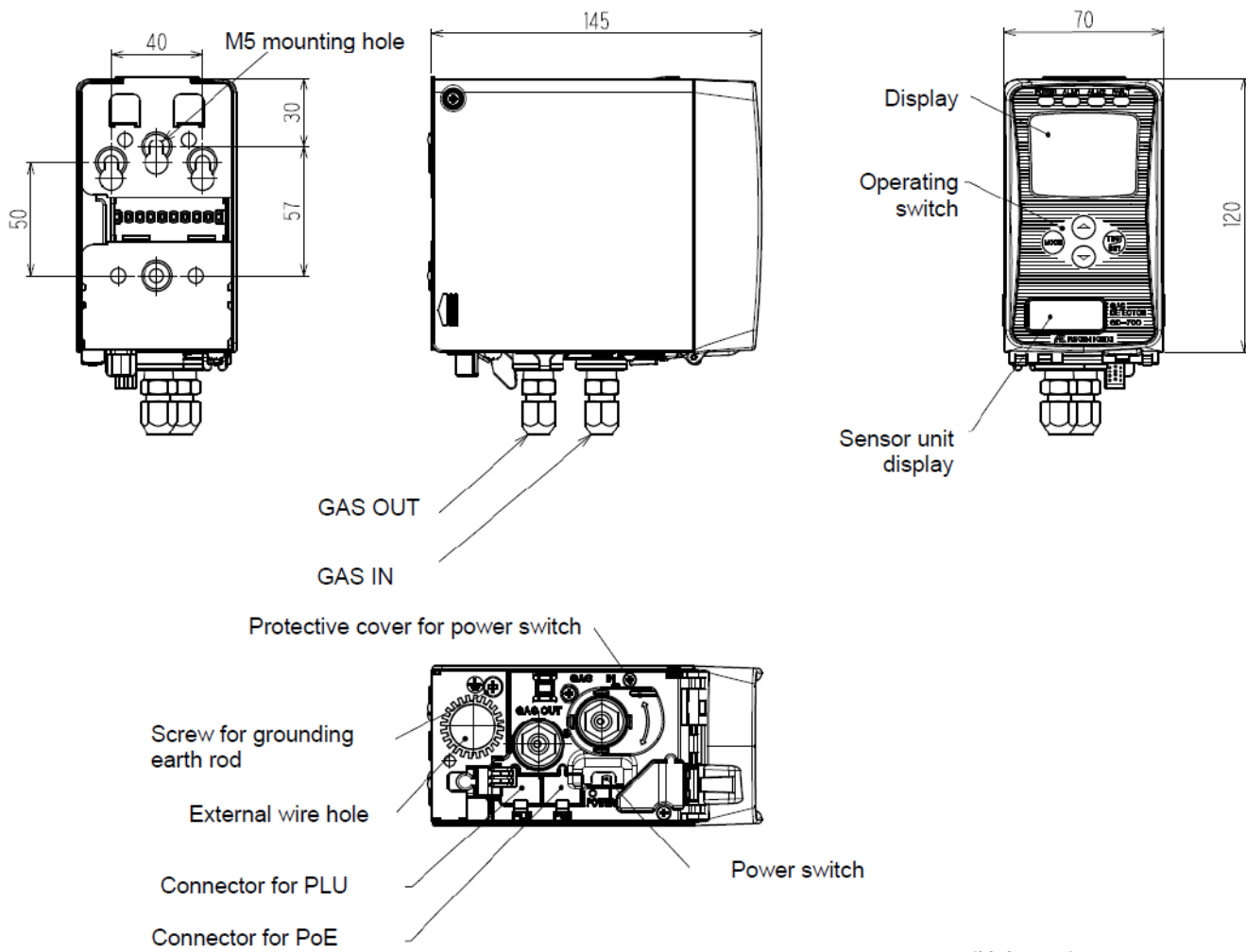
GAS DETECTOR HEAD **GD-70D (ESU - Anoxia alarm) SPECIFICATION**

Model	GD-70D
Detection principle	Electrochemical method
Detectable gas	Oxygen
Gas concentration display	LCD(digital and bar-meter display)
Measuring range*1	0~25vol%
Detection method	Pump suction method
Suction flow	0.5L/min±10%
Alarm setpoint*1	1st 18vol% (L) / 2nd 18vol% (L) [Standard]
Power indication	POWER lamp lighting(green)
Various indications	Gas/Flow/Mode
Output	Gas concentration signal/Gas alarm contact/Trouble alarm contact
Alarm 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) (without piping delay time)
Alarm-delay time*2 (under an identical condition)	By anoxia alarm(Alarm setpoint : 18vol%), less than 5sec (when introducing 10~11vol% gas) (without piping delay time)
Gas alarm type	Two-level alarm(L-LL)
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
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)
Piping port	Rc1/4 (PP half union<for 0. Dφ 6-1t>is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	-10~40°C(non-rapidly-vary. It may differ according to mounted sensor.)
Operating humidity	6~88%RH(non-condensing. It may differ according to mounted sensor.)
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.

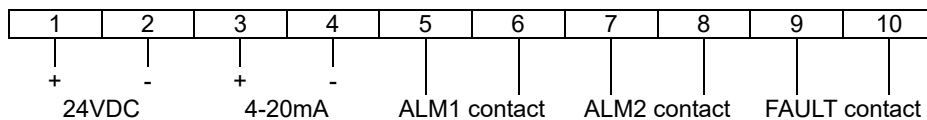
*2 In conformity to JIS T8201 2010(Oxygen deficiency indicator).

Outline Drawings



(Unit: mm)

Terminal Drawings



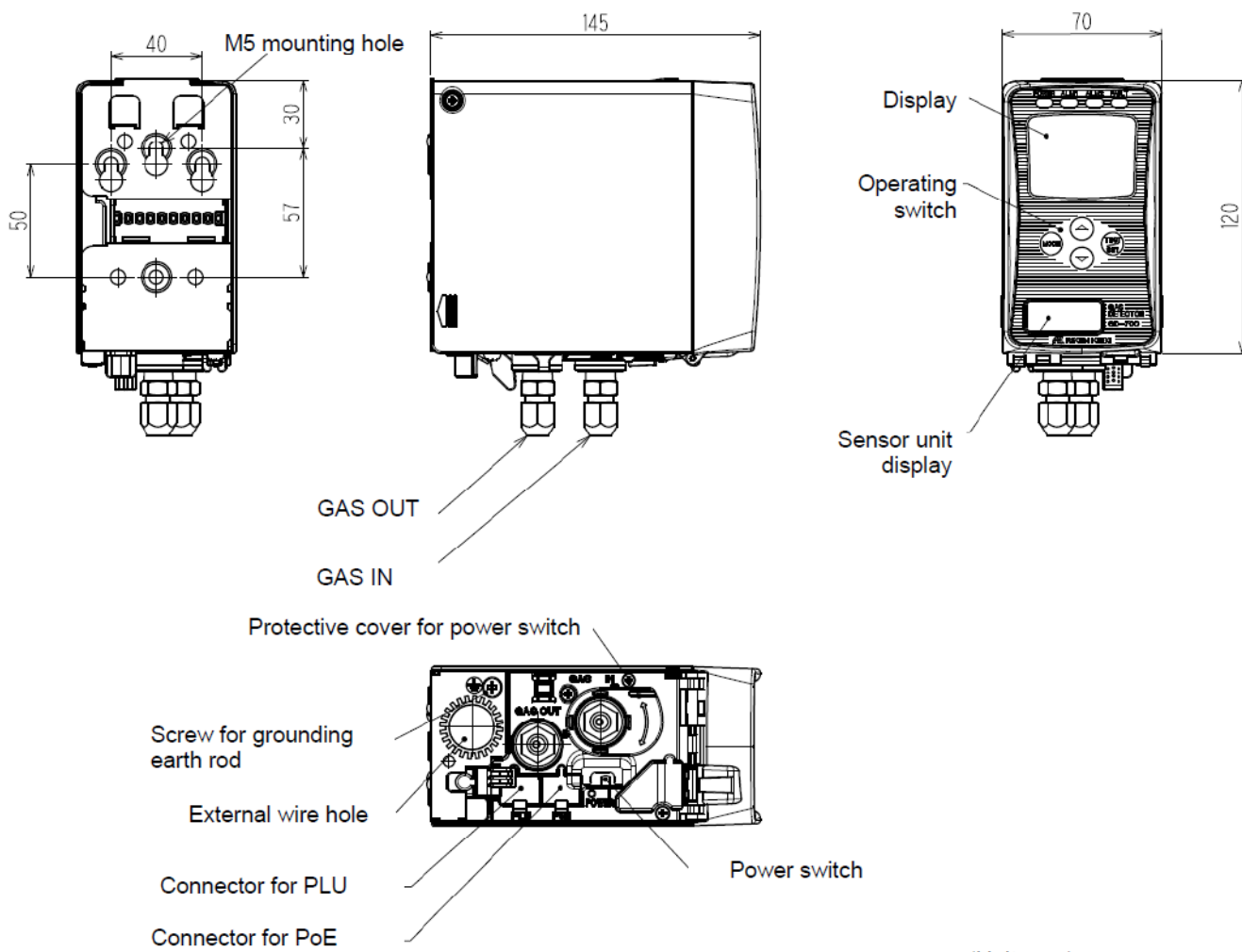
※For the 3-wire type (4 - 20 mA), the terminal 2 is used for common, and the terminals 2(-) and 3(+) are used to output 4 - 20 mA.

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

Model	GD-70D
Detection principle	Semi-conductor method
Detectable gas*	Combustible gas/Toxic gas
Gas concentration display	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 lighting(green)
Various indications	Gas/Flow/Mode
Output	Gas concentration signal/Gas alarm contact/Trouble alarm contact
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 (when introducing 1.6 times thicker gas than alarm preset point) (depends on gas) (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(1.25sq)・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 300 Ω)
Transmission cable	CVVS worth of shield cable(1.25sq)・3-core or 2-core
Various functions	White backlight/Alarm delay/Suppress/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 \pm 10%
Power consumption	Approx. 2.5W(MAX. 5W)
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	Less than 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

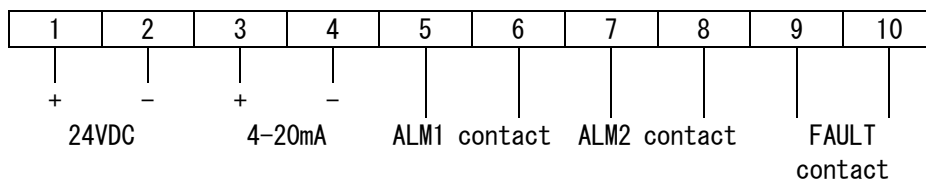
* Please specify your request when ordering.

Outline Drawings



(Unit: mm)

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.

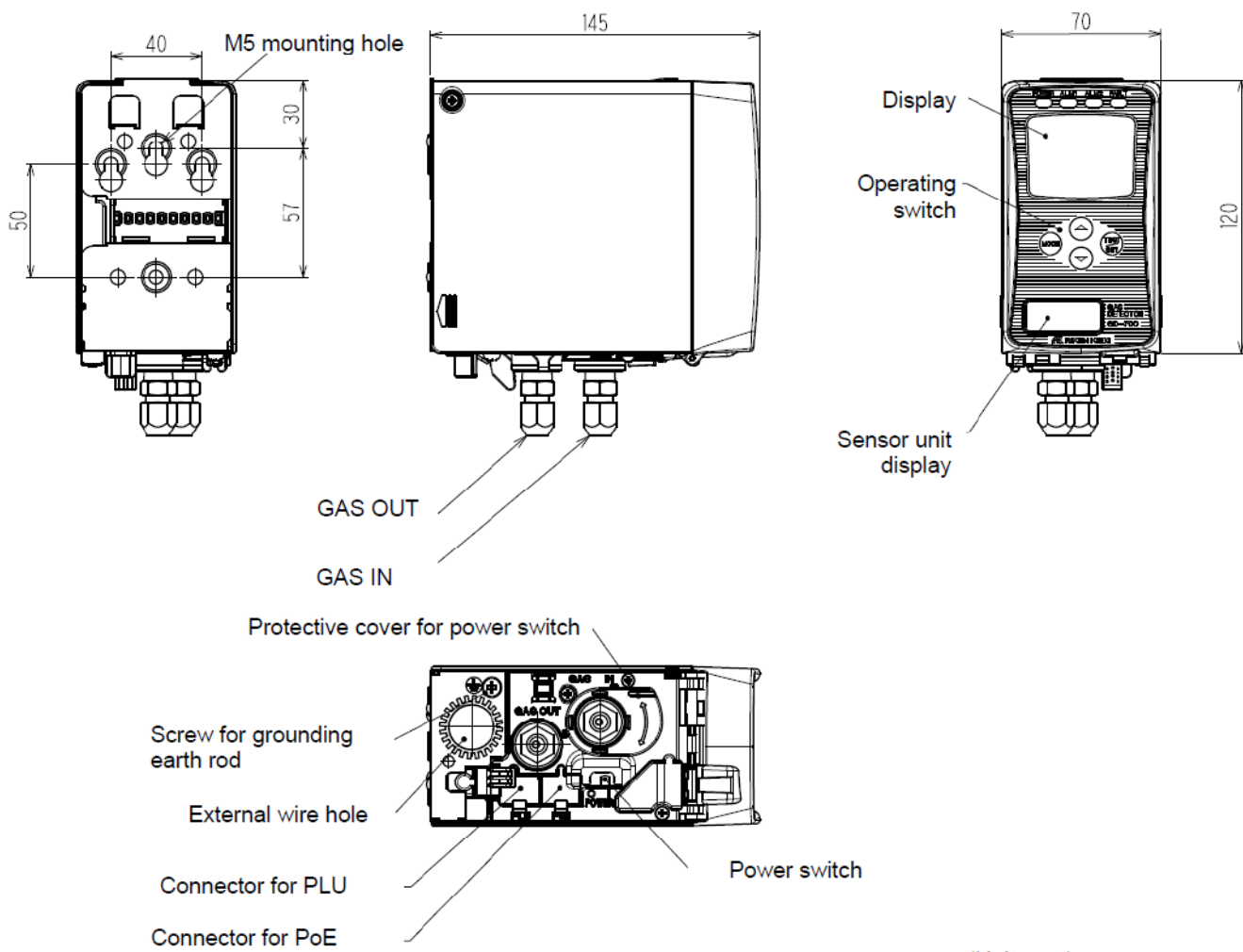
GAS DETECTOR HEAD GD-70D (OSU - Anoxia alarm) SPECIFICATION

Model	GD-70D
Detection principle	Galvanic cell method
Detectable gas	O ₂
Gas concentration display	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 lighting(green)
Various indications	Gas/Flow/Mode
Output	Gas concentration signal/Gas alarm contact/Trouble alarm contact
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) (without piping delay time)
Alarm-delay time*2 (under an identical condition)	By anoxia alarm(Alarm preset point : 18vol%), less than 5sec(when introducing 10~11vol% gas) (without piping delay time)
Gas alarm type	Two-level alarm(L-LL or L-H)
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
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/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)
Piping port	Rc1/4(PP half union<for 0. Dφ 6-1t>is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	0~40°C (non-rapidly-vary)
Operating humidity	Less than 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

*1 Please specify your request when ordering.

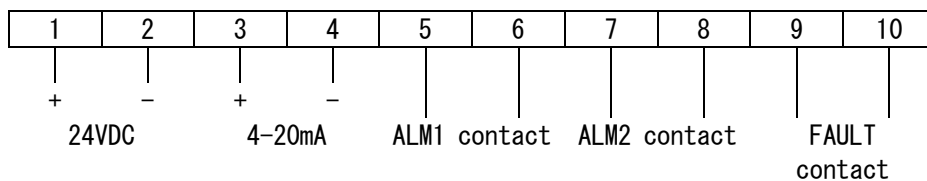
*2 In conformity to JIS T8201 2010(Oxygen deficiency indicator).

Outline Drawings



(Unit: mm)

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.

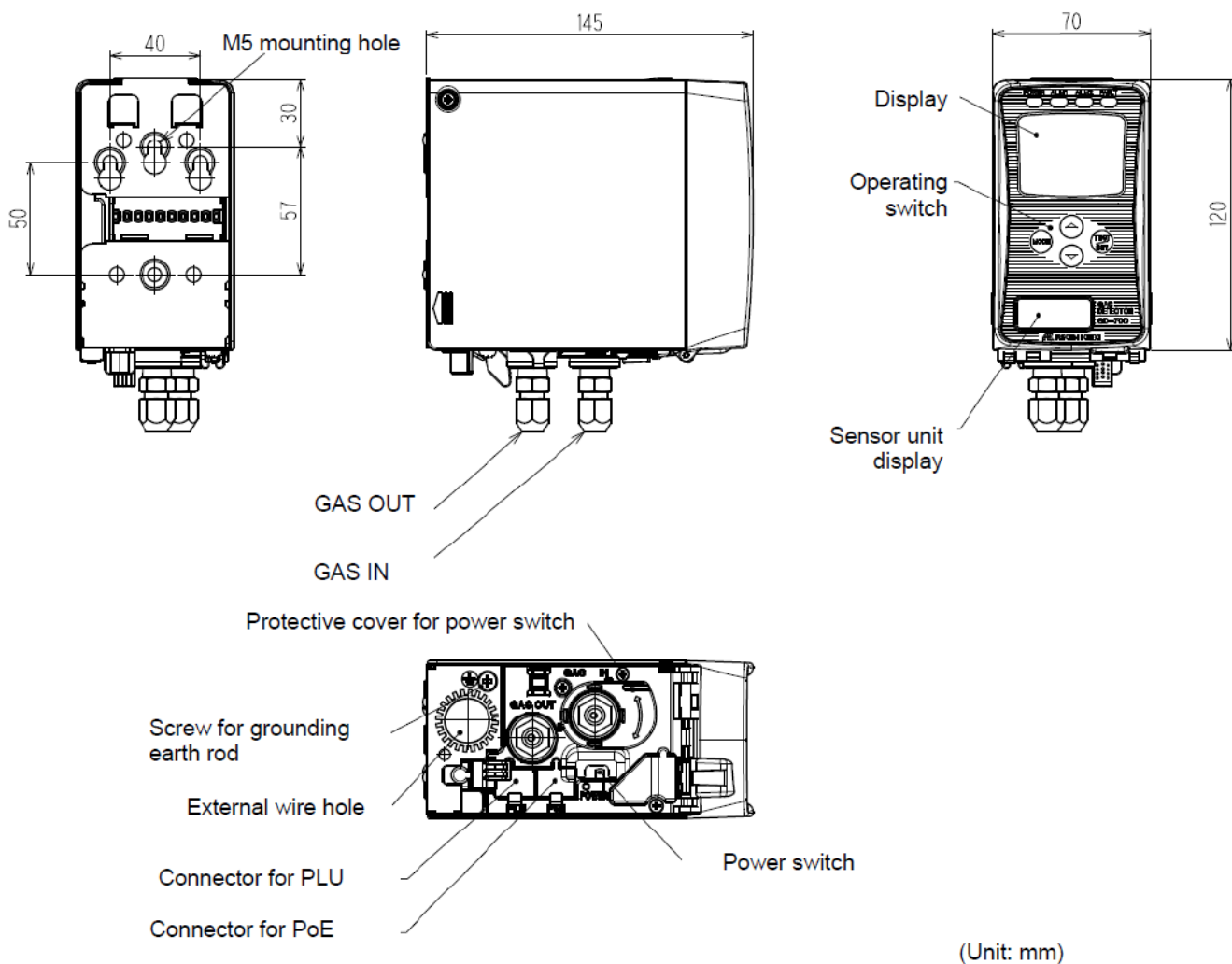
GAS DETECTOR HEAD

GD-70D (OSU - Gas monitoring) SPECIFICATION

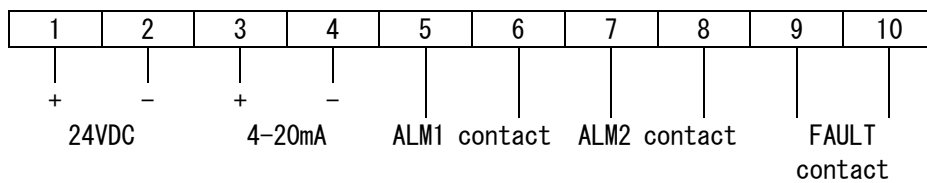
Model	GD-70D
Detection principle	Galvanic cell method
Detectable gas	O ₂
Gas concentration display	LCD(digital and bar-meter display)
Measuring range	0~5vol%/0~25vol%/0~50vol%/0~100vol%
Detection method	Pump suction method
Suction flow	0.5L/min±10%
Alarm preset point*	Depend on measuring range
Power indication	POWER lamp lighting(green)
Various indications	Gas/Flow/Mode
Output	Gas concentration signal/Gas alarm contact/Trouble alarm contact
Indicate accuracy (under an identical condition)	Less than ±0.7vol%(below 25vol% range) Less than ±3vol%(above 25vol% range)
Response time (under an identical condition)	Less than 30sec(T90) (without piping delay time)
Gas alarm type*	Two-level alarm(H-HH or L-H, L-LL)
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(1.25sq)・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/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)
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)
Operating humidity	Less than 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



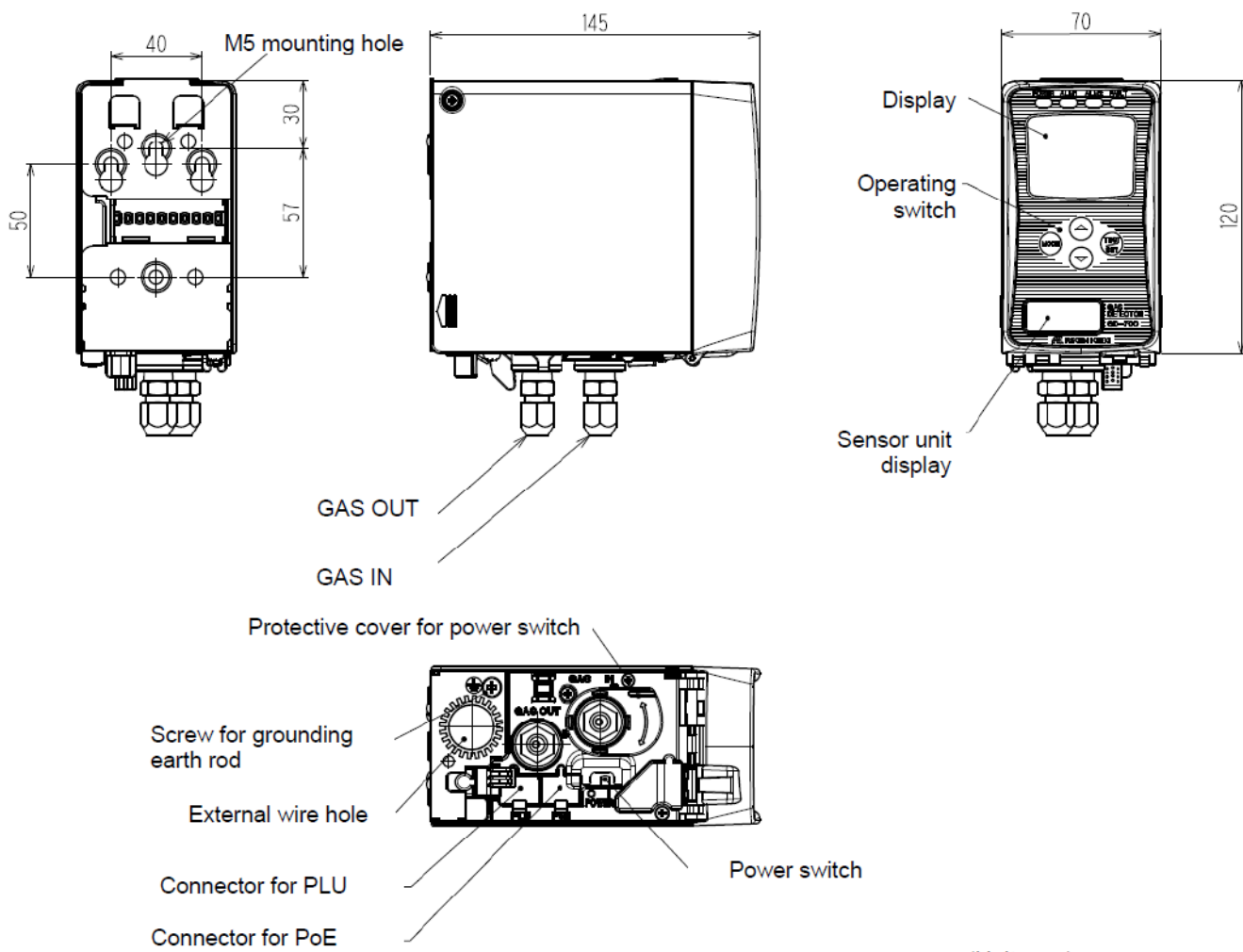
※For the 3-wire type (4 - 20 mA), the terminal 2 is used for common, and the terminals 2(-) and 3(+) are used to output 4 - 20 mA.

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

Model	GD-70D
Detection principle	New ceramic catalytic method
Detectable gas*	Combustible gas
Gas concentration display	LCD(digital and bar-meter display)
Measuring range*	Depend on Detectable gas
Detection method	Pump suction 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
Output	Gas concentration signal/Gas alarm contact/Trouble alarm contact
Alarm accuracy (under an identical condition)	Less than ±25%(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(1.25sq)・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/ 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. 3W(MAX. 5.5W)
Piping port	Rc1/4 (PP half union<for 0. D φ6-1t> is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	0~40°C (non-rapidly-vary)
Operating humidity	Less than 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

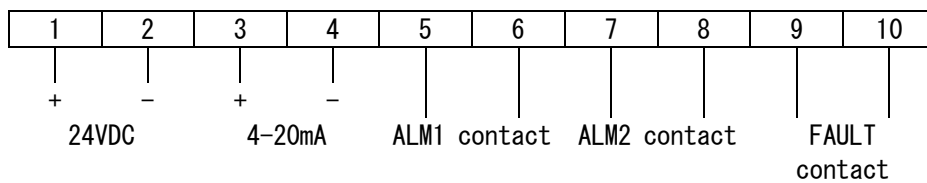
* Please specify your request when ordering.

Outline Drawings



(Unit: mm)

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.

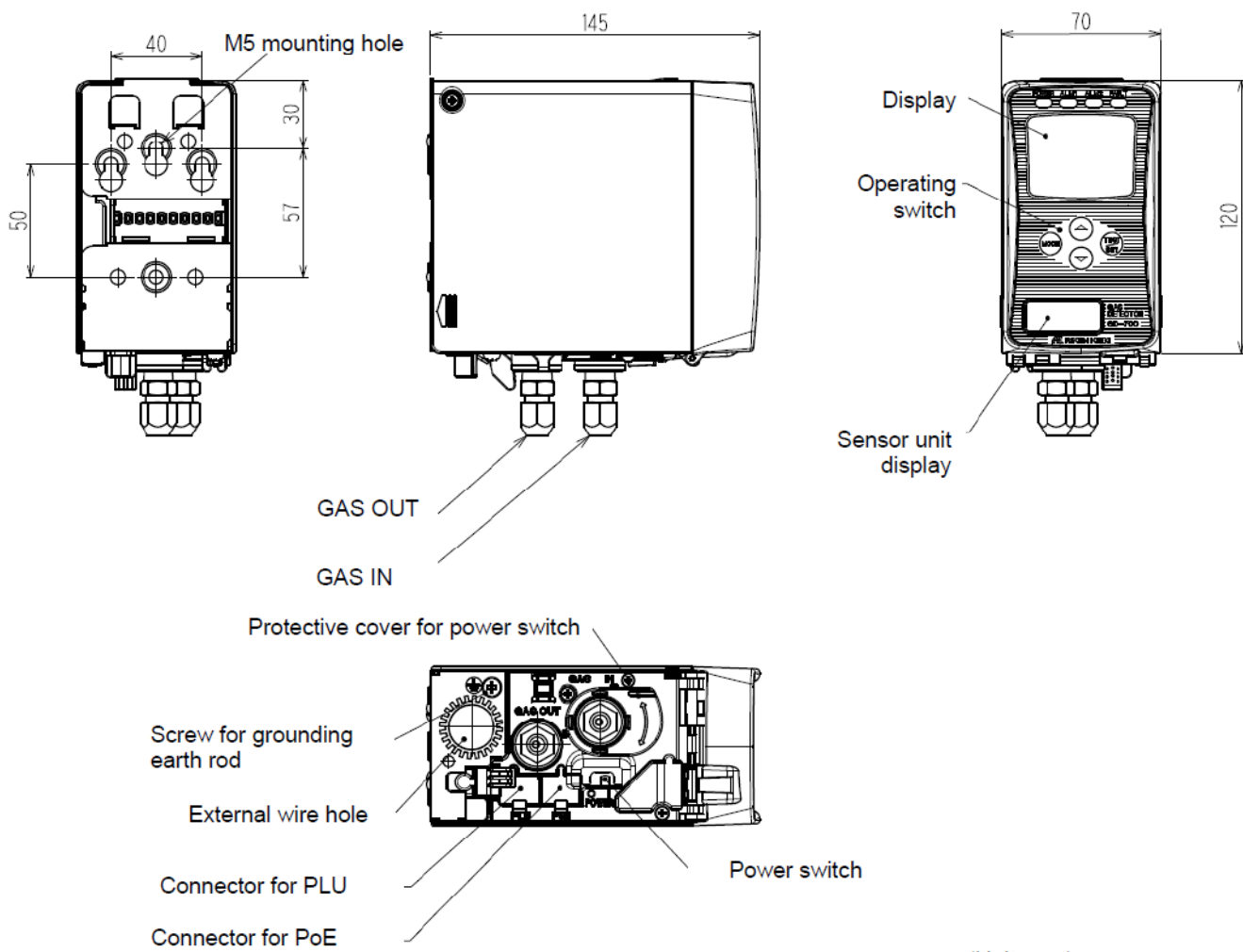
GAS DETECTOR HEAD

GD-70D (SHU) SPECIFICATION

Model	GD-70D
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 ±25%(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・Selfdiagnosis	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(1.25 mm ²)・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(1.25 mm ²)・3-core or 2-core
Various functions	White backlight/Alarm delay/Suppress/Flow control/ Proofreading history/Alarm trend history/Event history
Power cable	CVV worth of cable (1.25 mm ²)・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 0. Dφ 6-1t>is provided as standard accessories.)
Initial clear	Approx. 25sec
Operating temperature	0-40°C(non-rapidly-vary)
Operating humidity	Less than 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

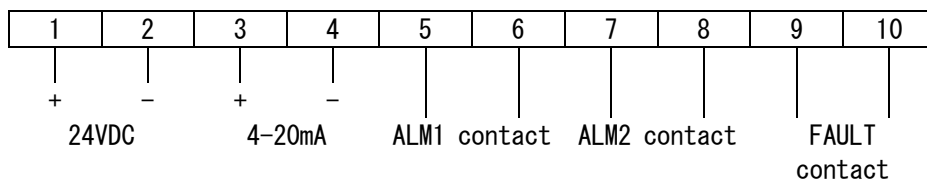
* Please specify your request when ordering.

Outline Drawings



(Unit: mm)

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.