Drawings

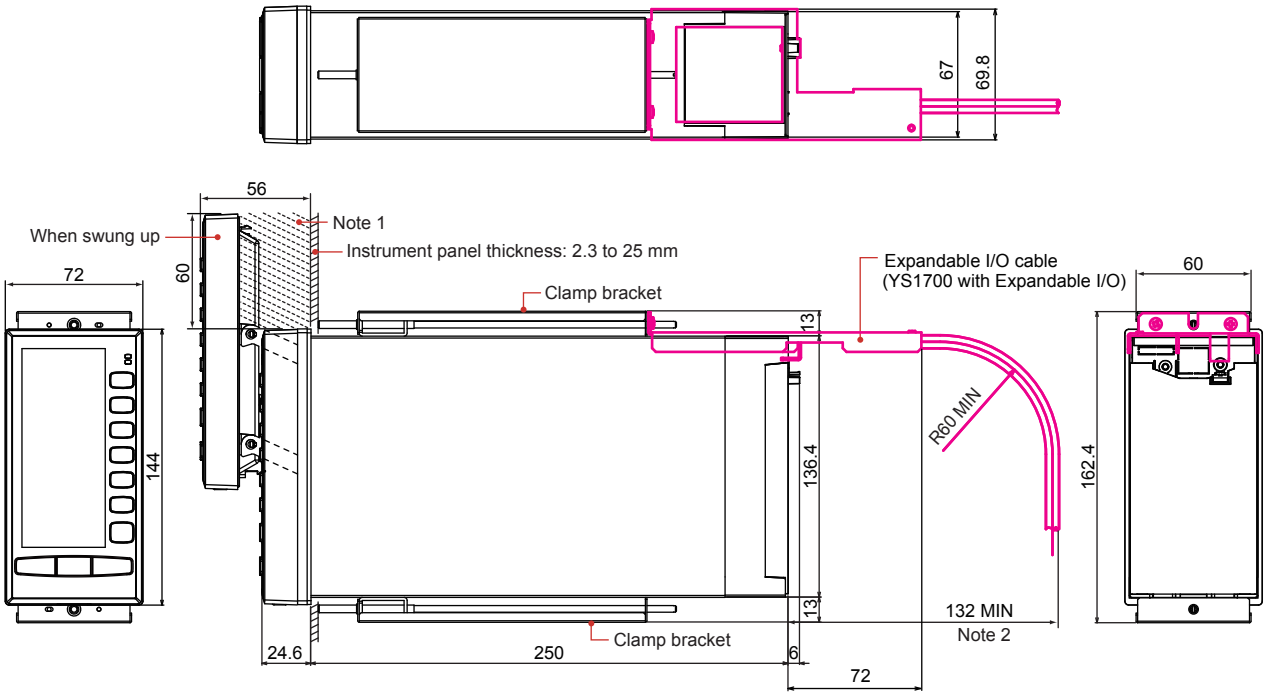
YS1500 Indicating Controller
(YS1500-□0□)
YS1700 Programmable Indicating Controller
(YS1700-□0□, YS1700-□1□)

YS1000 Series

SD 01B08B01-01E

Unit: mm

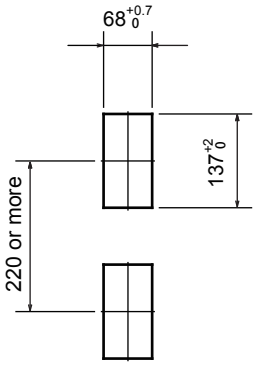
<External Dimensions>



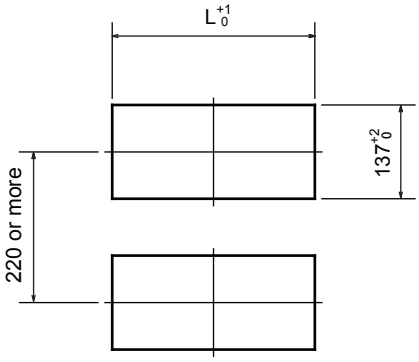
Weight: 1.6 kg (Basic type)
2.2 kg (Basic type with Expandable I/O)

Panel Cutout Dimensions

For single mounting:



For side-by-side mounting:



Panel Cutout Width for Side-by-side Mounting

Number of instruments to be mounted	L(mm)
2	140
3	212
4	284
5	356
6	428
7	500
8	572
9	644
10	716
11	788
12	860
13	932
14	1004

Trigonometry

General tolerance = ±(value of tolerance class IT18 based on JIS B 0401-1998) / 2

Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the height of the nameplate, etc. must be 30 mm or less from the panel surface.

Note 2: When installing the expandable I/O cable, secure the wiring space of at least 60 mm for a minimum curvature radius of the cable in addition to the mountiing bracket space of 72 mm from the terminal cover face of the main unit.

Note 3: To ensure good air ventilation, allow space of 100 mm or more at the top and bottom of the panel.

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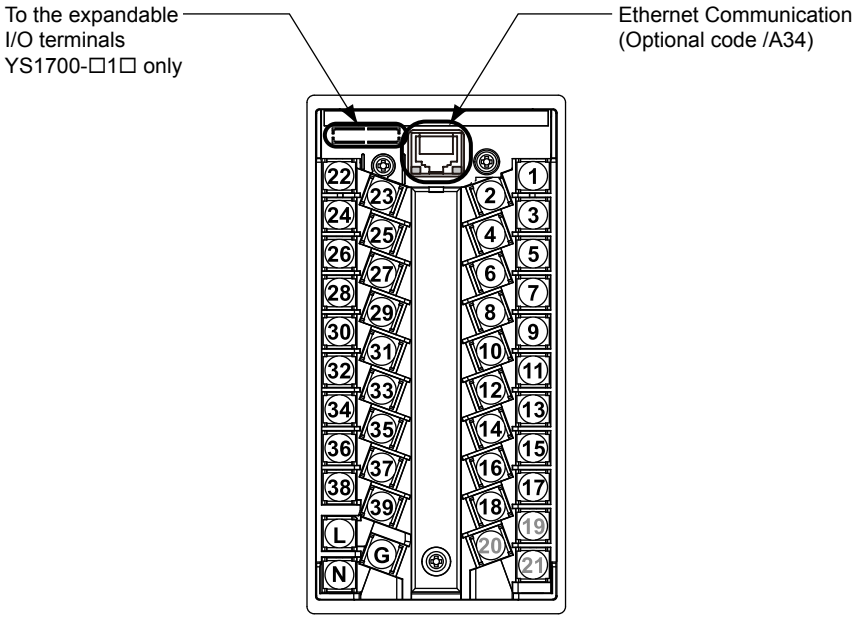
<Terminals Layout>



<Terminal Arrangement Table>

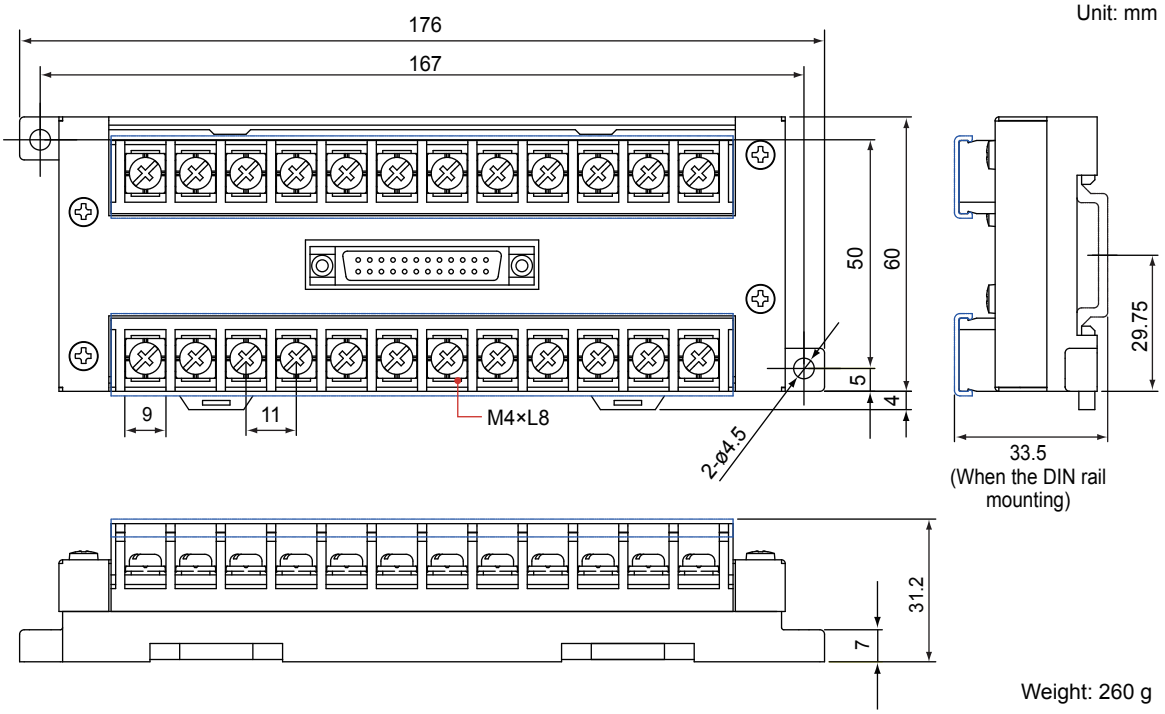
Terminal number	Programmable mode (YS1700 only)	Single-loop mode	Cascade mode	Selector mode	User settings ( ) mode (Note 8)
1 2	+ – Analog input 1 (1-5V DC)	+ – Measurement input (1-5V DC)	+ – Measurement input 1 (1-5V DC)	+ – Measurement input 1 (1-5V DC)	
3 4	+ – Analog input 2 (1-5V DC)	+ – Cascade setting input (1-5V DC)	+ – Cascade setting input (1-5V DC)	+ – Cascade setting input 1 (1-5V DC)	
5 6	+ – Analog input 3 (1-5V DC)	+ – Input value for output tracking (1-5V DC)	+ – Measurement input 2 (1-5V DC)	+ – Measurement input 2 (1-5V DC)	
7 8	+ – Analog input 4 (1-5V DC)	+ – Feedforward input (1-5V DC)	+ – Feedforward input (1-5V DC) (Note 1)	+ – Cascade setting input 2 (1-5V DC) (Note 1)	
9 10	+ – Analog input 5 (1-5V DC)				
11 12	+ – FAIL output (Note 2)	+ – FAIL output (Note 2)	+ – FAIL output (Note 2)	+ – FAIL output (Note 2)	
13	Connection of transmitter supply power (24V DC) (Note 3)	Connection of transmitter supply power (24V DC) (Note 3)	Connection of transmitter supply power (24V DC) (Note 3)	Connection of transmitter supply power (24V DC) (Note 3)	
14	Communication terminal SG	Communication terminal SG	Communication terminal SG	Communication terminal SG	
15	Communication terminal SDA (−)	Communication terminal SDA (−)	Communication terminal SDA (−)	Communication terminal SDA (−)	
16	Communication terminal SDB (+)	Communication terminal SDB (+)	Communication terminal SDB (+)	Communication terminal SDB (+)	
17	Communication terminal RDA (−) or LCS (+)	Communication terminal RDA (−) or LCS (+)	Communication terminal RDA (−) or LCS (+)	Communication terminal RDA (−) or LCS (+)	
18	Communication terminal RDB (+) or LCS (−)	Communication terminal RDB (+) or LCS (−)	Communication terminal RDB (+) or LCS (−)	Communication terminal RDB (+) or LCS (−)	
19 20 21					
22 23	+ – Analog output 1 (4 to 20mA DC)	+ – Manipulated output variable 1 (4 to 20mA DC)	+ – Manipulated output variable 1 (4 to 20mA DC)	+ – Manipulated output variable 1 (4 to 20mA DC)	
24 25	+ – Analog output 2 (1-5V DC)	+ – Manipulated output variable 2 (1-5V DC) (Note 4)	+ – Manipulated output variable 2 (1-5V DC) (Note 4)	+ – Manipulated output variable 2 (1-5V DC) (Note 4)	
26 27	+ – Analog output 3 (4 to 20mA DC/1-5V DC) (Note 5)	+ – Setpoint value output (1-5V DC) (Note 4)	+ – Setpoint value output (1-5V DC) (Note 4)	+ – Setpoint value output (1-5V DC) (Note 4)	
28 29	+ – Digital output 1/Digital input 6 (Note 6)	+ – High limit alarm setpoint for PV output (Note 7)	+ – LOOP 1 alarm output (Note 7)	+ – LOOP 1 alarm output (Note 7)	
30 31	+ – Digital output 2/Digital input 5 (Note 6)	+ – Low limit alarm setpoint for PV output (Note 7)	+ – LOOP 2 alarm output (Note 7)	+ – LOOP 2 alarm output (Note 7)	
32 33	+ – Digital output 3/Digital input 4 (Note 6)	+ – Velocity alarm setpoint for PV output (Note 7)	+ – O/C status output (Note 7)	+ – L/R status output (Note 7)	
34 35	+ – Digital output 4/Digital input 3 (Note 6)	+ – C/A • M status output (Note 7)	+ – C/A • M status output (Note 7)	+ – C/A • M status output (Note 7)	
36 37	+ – Digital output 5/Digital input 2 (Note 6)	+ – C • A/M status output (Note 7)	+ – C • A/M status output (Note 7)	+ – C • A/M status output (Note 7)	
38 39	+ – Digital output 6/Digital input 1 (Note 6)	+ – No function (Factory default) (Note 7)	+ – No function (Factory default) (Note 7)	+ – No function (Factory default) (Note 7)	
L N ⏚	+ – Power supply Grounding terminal	+ – Power supply Grounding terminal	+ – Power supply Grounding terminal	+ – Power supply Grounding terminal	

Note 1: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.
Note 2: Using the terminals as fail output requires an external power supply.
Note 3: For a transmitter power supply, see “Wiring” of “Installation and Wiring” in each YS1000 Operation Guide.
Note 4: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.
Note 5: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.
Note 6: Using these terminals as digital output requires an external power supply. The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).
Note 7: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.
Note 8: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

NOTE : Do not use an unused terminal as a relaying terminal, etc.

● Expandable I/O Terminal (YS010)

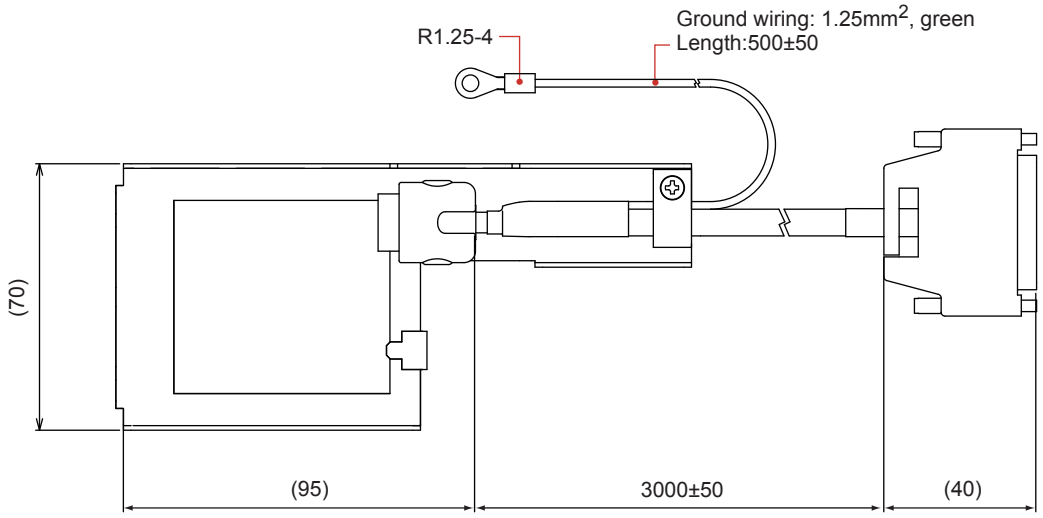
Unit: mm



Weight: 260 g

● Expandable I/O Cable (YS011)

Unit: mm



Weight: 320 g