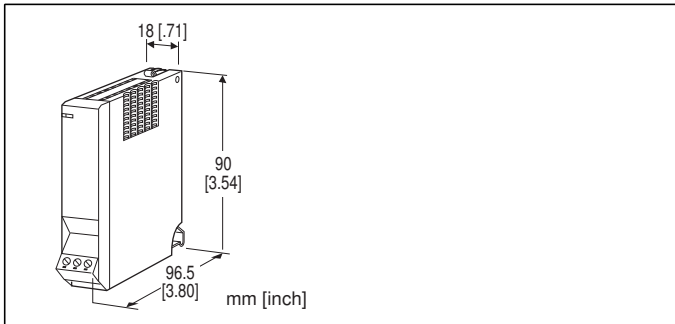


Remote I/O R5 Series

RTD INPUT MODULE

(high resolution)



MODEL: R5-RSA[1][2][3]

ORDERING INFORMATION

- Code number: R5-RSA[1][2][3]
- Specify a code from below for each of [1] through [3].
(e.g. R5-RSA2W/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] NO. OF CHANNELS

- 1: 1 channel
- 2: 2 channels

[2] COMMUNICATION MODE

- S: Single
- W: Dual

[3] OPTIONS

- blank: none
- /Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

- COATING (For the detail, refer to our web site.)
- /C01: Silicone coating
- /C02: Polyurethane coating
- /C03: Rubber coating

GENERAL SPECIFICATIONS

Connection

- Internal bus:** Via the Installation Base (model: R5-BS)
- Input:** Euro type connector terminal
(Applicable wire size: 0.2 - 2.5 mm² (AWG24 - 12),
stripped length 7 mm)
- Internal power:** Via the base (model: R5-BS)

- Isolation:** Input 1 to input 2 to internal bus or internal power
- Sensor type:** Selectable with the side DIP SW
- Temperature unit:** °C or °F selectable with the side DIP SW
- Burnout detection:** Upscale or downscale selectable with the side DIP SW

- Linearization:** Standard
- RUN indicator:** Bi-color (red/green) LED;
Red when the bus A operates normally;
Green when the bus B operates normally;
Amber when both buses operate normally.

INPUT SPECIFICATIONS

- Maximum leadwire resistance:** 10 Ω per wire
- Sensing current:** ≤ 1 mA
(Factory setting is Pt 100 (JIS '97, IEC))

Temperature range

RTD	USABLE RANGE	BURNOUT VALUES
	°C	°C × 100
JPt 100 (JIS '89)	-20 to +200	-23600, +32767
Pt 100 (JIS '89)	-20 to +200	-24000, +32767
Pt 100 (JIS '97, IEC)	-20 to +200	-24000, +32767
RTD	USABLE RANGE	BURNOUT VALUES
	°F	°F × 10
JPt 100 (JIS '89)	-4 to +392	-3928, +10400
Pt 100 (JIS '89)	-4 to +392	-4000, +16500
Pt 100 (JIS '97, IEC)	-4 to +392	-4000, +16500

INSTALLATION

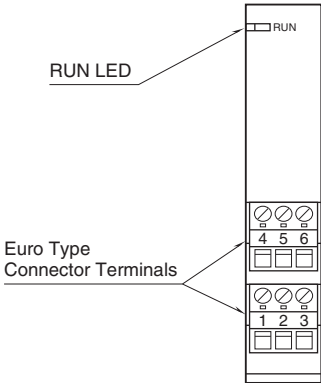
- Operating temperature:** -10 to +55°C (14 to 131°F)
- Operating humidity:** 30 to 90 %RH (non-condensing)
- Atmosphere:** No corrosive gas or heavy dust
- Mounting:** Installation Base (model: R5-BS)
- Weight:** 100 g (0.22 lb)

PERFORMANCE

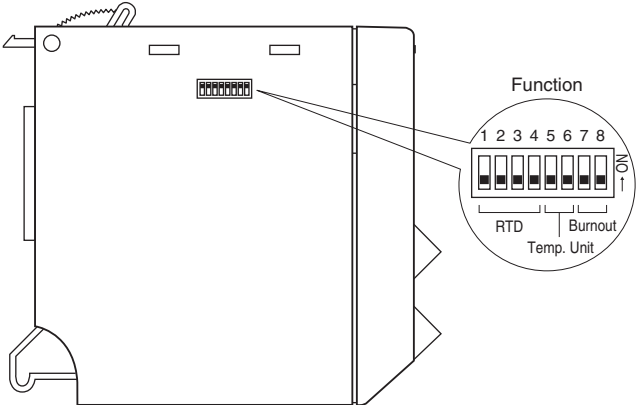
- Conversion accuracy:** ±0.1°C (±0.2°F)
- Data range**
°C: Engineering unit value × 100 (integer)
°F: Engineering unit value × 10 (integer)
- Data allocation:** 1 (2 for 2-channel type)
- Temp. coefficient:** ±0.015 %/°C (±0.008 %/°F)
- Response time:** ≤ 0.2 sec. (0 - 90 %)
- Burnout response time:** ≤ 2 sec.
- Insulation resistance:** ≥ 100 MΩ with 500 V DC
- Dielectric strength:** 1500 V AC @ 1 minute (input 1 to input 2 to internal bus or internal power)
2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

EXTERNAL VIEW

■ FRONT VIEW



■ SIDE VIEW



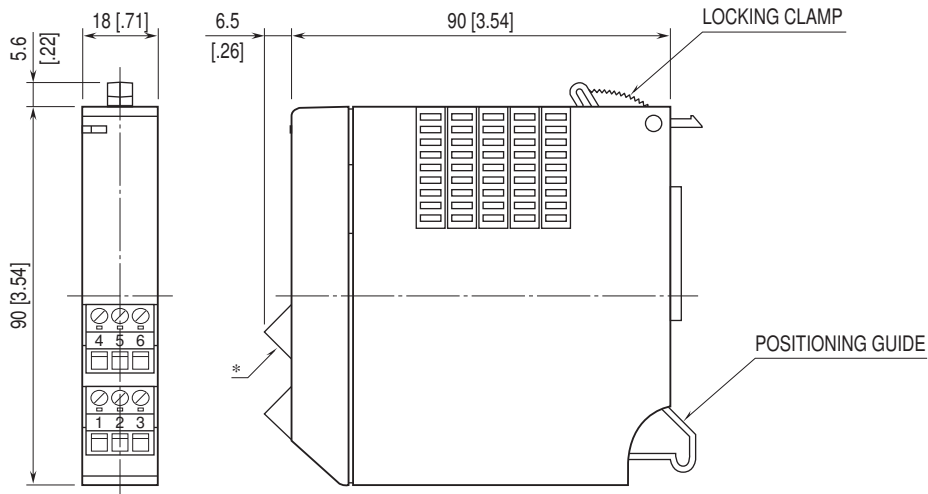
INPUT DATA DESCRIPTIONS

■ ANALOG DATA (TEMPERATURE DATA)

16-bit binary data.
 With °C temperature unit, raw data is multiplied by 100. For example, 25.5°C is converted into 2550.
 With °F temperature unit, raw data is multiplied by 10. For example, 135.4°F is converted into 1354.
 Minus temperature is converted into negative values, represented in 2's complements.

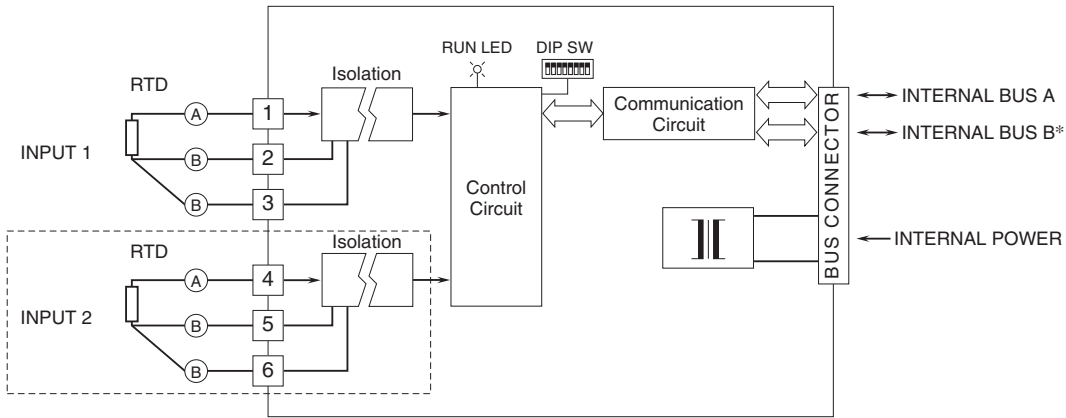


EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



*Euro type connector terminals [4, 5 and 6] provided only with 2-ch. option.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.
Note: The section enclosed by broken line is with 2-ch. option.



Specifications are subject to change without notice.