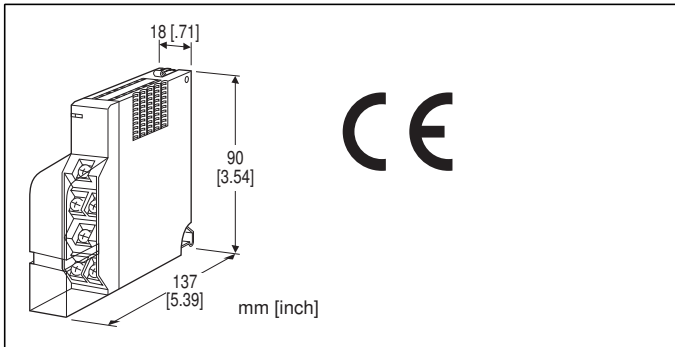


## Remote I/O R5 Series

### RTD INPUT MODULE

(screw terminal block)



### MODEL: R5T-RS[1][2][3]

#### ORDERING INFORMATION

- Code number: R5T-RS[1][2][3]  
Specify a code from below for each of [1] through [3].  
(e.g. R5T-RS2W/Q)
- Specify the specification for option code /Q  
(e.g. /C01/S01)

#### [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 (multiple selections)

COATING (For the detail, refer to our web site.)

- /C01: Silicone coating
  - /C02: Polyurethane coating
  - /C03: Rubber coating
- TERMINAL SCREW MATERIAL
- /S01: Stainless steel

#### GENERAL SPECIFICATIONS

##### Connection

- Internal bus:** Via the Installation Base (model: R5-BS)
- Input:** M3.5 screw terminal block (torque 0.8 N·m)

**Internal power:** Via the base (model: R5-BS)

**Screw terminal:** Nickel-plated steel (standard) or stainless steel

**Isolation:** Input 1 to input 2 to internal bus or internal power

**Sensor type:** Selectable with the side DIP SW

**Temperature unit:** °C, °F or absolute temperature 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:** 200 Ω per wire (3-wire)

**Sensing current:** ≤ 1 mA

##### Temperature range

RTD	°C	
	USABLE RANGE	CONFORMANCE RANGE
Cu 10 @25°C	-212 to +312	-50 to +250
Cu 50	-100 to +200	-50 to +150
JPt 100 (JIS '89)	-236 to +560	-200 to +510
Pt 100 (JIS '89)	-240 to +900	-200 to +660
Pt 100 (JIS'97, IEC)(*)	-240 to +900	-200 to +850
Pt 1000	-240 to +900	-200 to +850
Pt 50Ω (JIS '81)	-236 to +700	-200 to +649
Ni 100	-100 to +252	-80 to +250
Ni 508.4Ω	-100 to +332	-50 to +200
RTD	°F	
	USABLE RANGE	CONFORMANCE RANGE
Cu 10 @25°C	-350 to +594	-58 to +482
Cu 50	-148 to +392	-58 to +302
JPt 100 (JIS '89)	-393 to +1040	-328 to +950
Pt 100 (JIS '89)	-400 to +1652	-328 to +1220
Pt 100 (JIS'97, IEC)(*)	-400 to +1652	-328 to +1562
Pt 1000	-400 to +1652	-328 to +1562
Pt 50Ω (JIS '81)	-393 to +1292	-328 to +1200
Ni 100	-148 to +486	-112 to +482
Ni 508.4Ω	-148 to +630	-58 to +392

(\*) Factory setting.

Max. (upscale) or min. (downscale) value of the usable range when a burnout is detected.

#### 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:** 110 g (0.24 lb)

## PERFORMANCE

**Conversion accuracy:**  $\pm 0.4^{\circ}\text{C}$  ( $\pm 1^{\circ}\text{F}$ )  
 ( $\pm 3.0^{\circ}\text{C}$  [ $\pm 5.4^{\circ}\text{F}$ ] for Cu 10)

**Data range**

**$^{\circ}\text{C}$ , absolute temperature:** Engineering unit value  $\times 10$   
 (integer)

**$^{\circ}\text{F}$ :** Engineering unit value (integer)

**Data allocation:** 1 (2 for 2-channel type)

**Temp. coefficient:**  $\pm 0.015\ \%/^{\circ}\text{C}$  ( $\pm 0.008\ \%/^{\circ}\text{F}$ )

**Response time:**  $\leq 0.2$  sec. (0 - 90 %)

**Burnout response time:**  $\leq 2$  sec.

**Insulation resistance:**  $\geq 100\ \text{M}\Omega$  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)

## STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

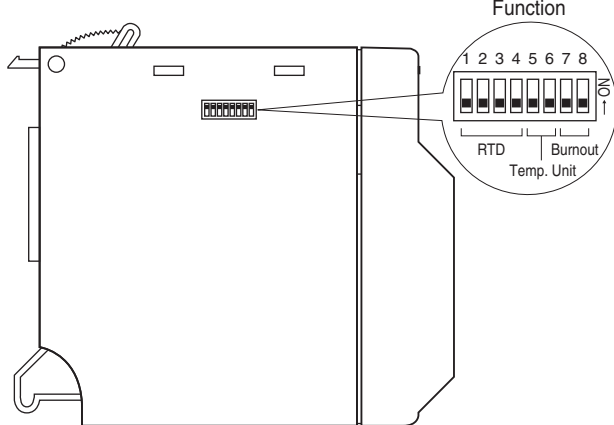
EMI EN 61000-6-4

EMS EN 61000-6-2

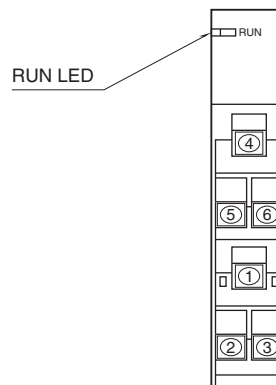
RoHS Directive

## EXTERNAL VIEW

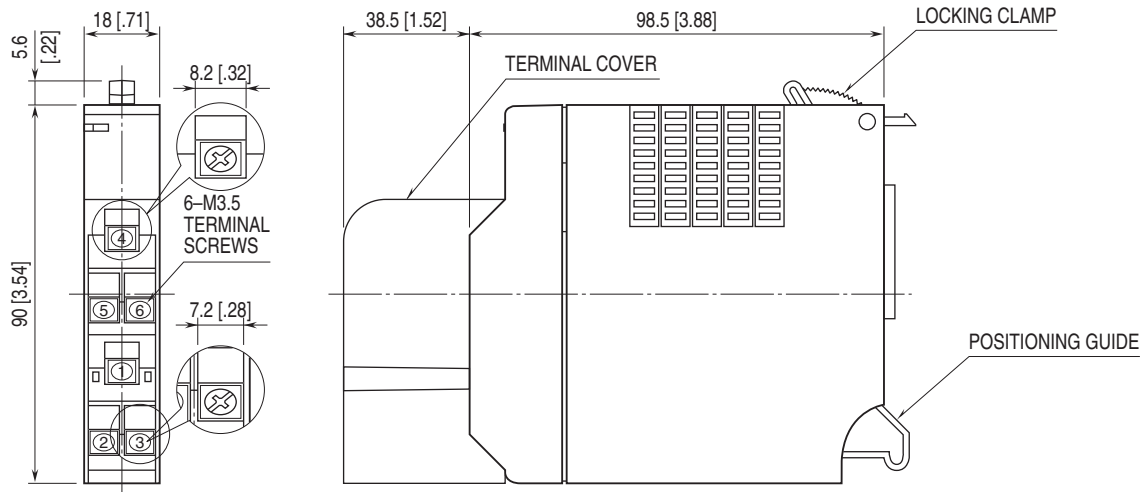
■ SIDE VIEW



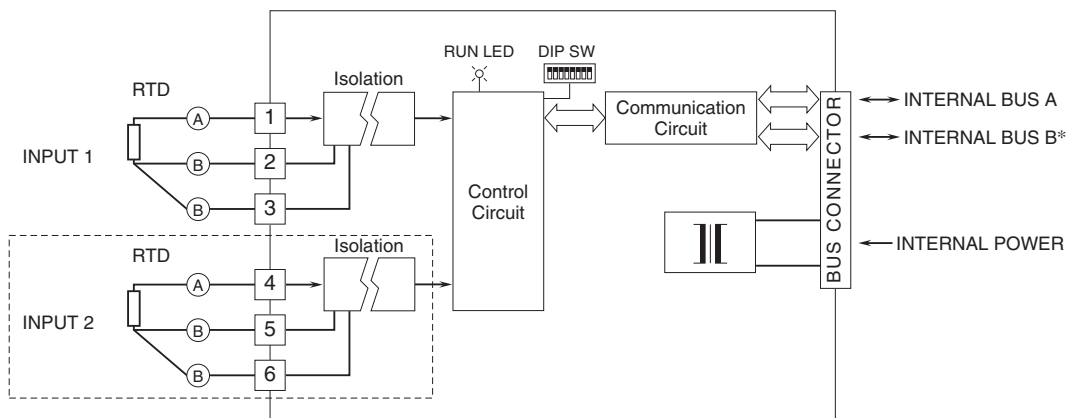
■ FRONT VIEW



## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



## 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.