

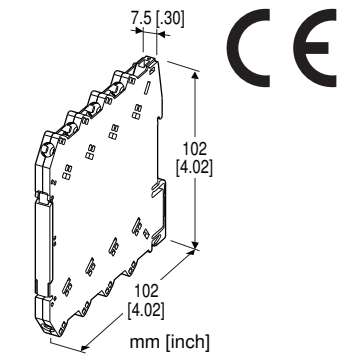
Remote I/O R6 Series

RTD INPUT MODULE

(2 points, Screw terminal)

Functions & Features

- Accepts direct input from an RTD and provides an isolated, linearized DC signal compact size remote I/O module



MODEL: R6N-RS2[1]

ORDERING INFORMATION

- Code number: R6N-RS2[1]
- Specify a code from below for [1].
(e.g. R6N-RS2/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to M-System's web site.)

/C01: Silicone coating

/C02: Polyurethane coating

RELATED PRODUCTS

- PC configurator software (model: R6CON)

Downloadable at M-System's web site.

A dedicated cable is required to connect the module to the PC. Please refer to the internet software download site or the users manual for the PC configurator for applicable cable types.

GENERAL SPECIFICATIONS

Connection

Internal bus: Via the Installation Base (model: R6N-BS)

Input: M3 screw terminals (torque 0.5 N·m)

Internal power: Via the Installation Base (model: R6N-BS)

Recommended solderless terminal: Max. 5.8 mm (0.23") wide; Ones with insulation sleeve do not fit.

Applicable wire size: 0.2 - 2.5 mm²

Housing material: Flame-resistant resin (black)

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

Zero adjustments: PC programming

Span adjustments: PC programming

Input type: Selectable with the side DIP SW or PC programming

Burnout detection: Upscale or downscale selectable with the side DIP SW or PC programming

Linearization: Standard

Module address: Selectable with DIP and rotary switches on the side

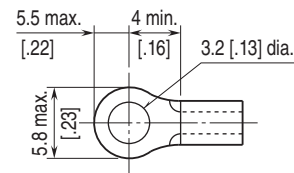
Configuration mode: With DIP switches on the side panel

Power indicator: Green LED; Refer to the instruction manual for details.

Status indicator: Bi-color (red/green) LED;

Refer to the instruction manual for details.

■ Recommended solderless terminal (unit: mm [inch])



INPUT SPECIFICATIONS

Input resistance: $\geq 1 \text{ M}\Omega$

Maximum leadwire resistance: 100 Ω per wire

Sensing current: $\leq 1 \text{ mA}$

RTD	BURNOUT INDICATION (°C)		CONFORMANCE RANGE (°C)
	Downscale	Upscale	
Pt 100 (JIS '97, IEC)	-240	+900	-200 to +850
Pt 100 (JIS '89)	-240	+900	-200 to +660
JPt 100 (JIS '89)	-236	+560	-200 to +510
Pt 50 Ω (JIS '81)	-236	+700	-200 to +649
Ni 100	-100	+252	-80 to +250
Cu 10 @ 25°C	-212	+312	-50 to +250
Cu 50	-100	+200	-50 to +150

RTD	BURNOUT INDICATION (°F)		CONFORMANCE RANGE (°F)
	Downscale	Upscale	
Pt 100 (JIS '97, IEC)	-400	+1652	-328 to +1562
Pt 100 (JIS '89)	-400	+1652	-328 to +1220
JPt 100 (JIS '89)	-393	+1040	-328 to +950
Pt 50 Ω (JIS '81)	-393	+1292	-328 to +1200
Ni 100	-148	+486	-112 to +482
Cu 10 @ 25°C	-350	+594	-58 to +482
Cu 50	-148	+392	-58 to +302

INSTALLATION

- Current consumption:** 20 mA
- 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: R6N-BS)
- Weight:** 60 g (2.1 oz)

PERFORMANCE

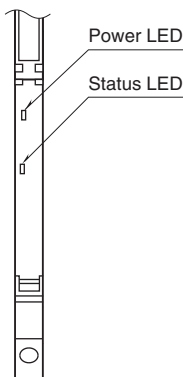
- Conversion accuracy:** $\pm 1^{\circ}\text{C}$ ($\pm 1.8^{\circ}\text{F}$) except $\pm 3^{\circ}\text{C}$ ($\pm 5.4^{\circ}\text{F}$) for Cu 10 @ 25°C
- Conversion rate:** 250 msec. / 500 msec.(PC programmable. Factory set to 500 msec.)
- Converted data range:**
 - Engineering unit value ($^{\circ}\text{C}$, K) $\times 10$ (integer)
 - Engineering unit value ($^{\circ}\text{F}$)
- Data allocation:** 2
- Temp. coefficient:** $\pm 0.01\%$ / $^{\circ}\text{C}$ ($\pm 0.006\%$ / $^{\circ}\text{F}$) of max. span
- Response time:** Conversion rate $\times 2 + 50$ msec. or less
- Line voltage effect:** $\pm 0.1\%$ over voltage range
- 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 to ground)

STANDARDS & APPROVALS

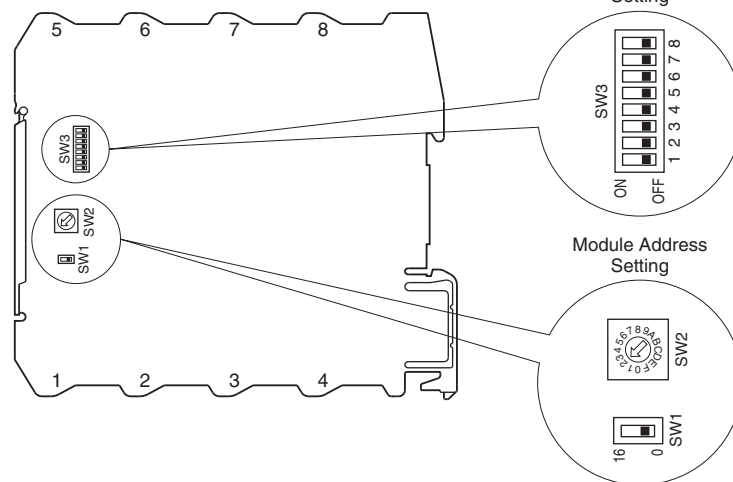
- EU conformity:**
 - EMC Directive
 - EMI EN 61000-6-4
 - EMS EN 61000-6-2
- RoHS Directive

EXTERNAL VIEW

• Front View (cover opened)

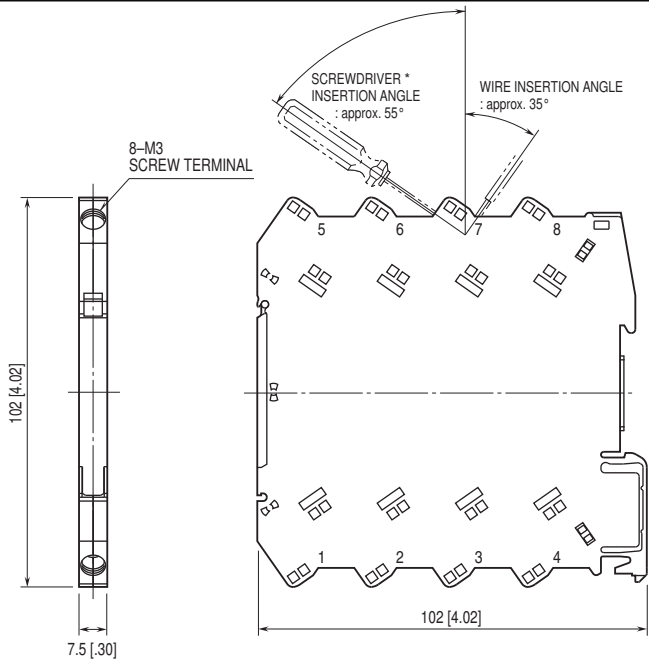


• Side View



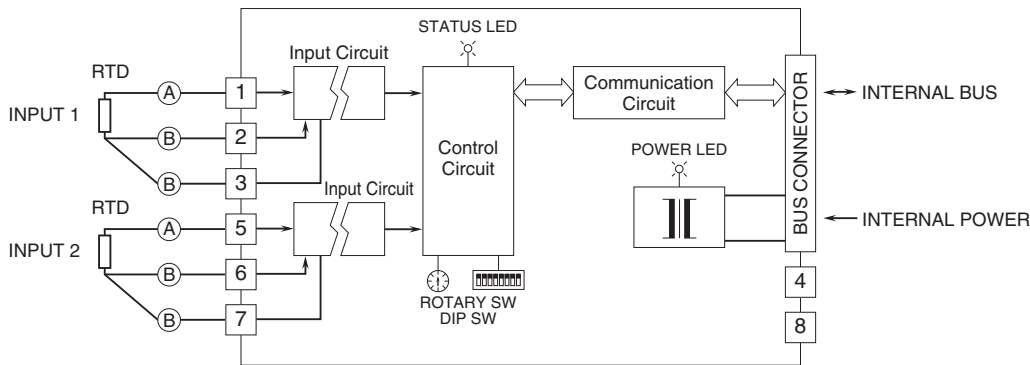
Refer to the instruction manual for setting procedures.

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



*Screwdriver stem diameter: 6 mm [.24"] or less

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



Specifications are subject to change without notice.