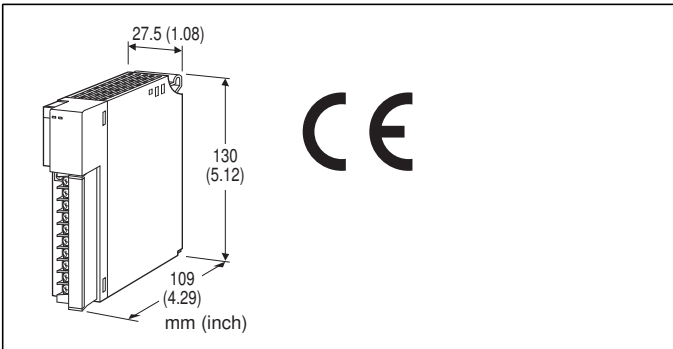


Remote I/O R3 Series

DC MILLIVOLT INPUT MODULE

(4 points, isolated)



MODEL: R3-SV4A[1][2]

ORDERING INFORMATION

- Code number: R3-SV4A[1][2]
Specify a code from below for each of [1] and [2].
(e.g. R3-SV4AW/CE/Q)
- Specify the specification for option code /Q
(e.g. /C01/SET)

NO. OF CHANNELS

4A: 4 points (mV)

[1] COMMUNICATION MODE

S: Single

W: Dual

[2] OPTIONS (multiple selections)

Standards & Approvals

blank: Without CE

/CE: CE marking

Other Options

blank: none

/Q: Option other than the above (specify the specification)

SPECIFICATIONS OF OPTION: Q (multiple selections)

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

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

EX-FACTORY SETTING

/SET: Preset according to the Ordering Information Sheet
(No. ESU-8410)

CAUTION

■UNUSED INPUT CHANNELS

Set the unused channels to open. Otherwise, set them as "Unused" with PC Configurator software: R3CON.

GENERAL SPECIFICATIONS

Connection

Internal bus: Via the Installation Base (model: R3-BSx)

Input: M3 separable screw terminal (torque 0.5 N·m)

Internal power: Via the Installation Base
(model: R3-BSx)

Screw terminal: Nickel-plated steel

Isolation: Input 1 to input 2 to input 3 to input 4 to internal bus or internal power

Input range: Selectable with the side DIP SW

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.

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

Red with input circuit abnormality (AD converter response failure);

Green in normal operating conditions.

INPUT SPECIFICATIONS

Input: -100 ~ +100 mV, -60 ~ +60 mV, -50 ~ +50 mV, 0 ~ 100 mV, 0 ~ 60 mV, 0 ~ 50 mV DC

Input resistance: 100 kΩ min.

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: R3-BSx)

Weight: 200 g (0.44 lb)

PERFORMANCE

Conversion accuracy: Refer to the table at the end of this section.

Conversion rate: 80 / 40 / 20 / 10 msec. selectable

Data range: 0 ~ 10000 of the input range

Data allocation: 4

Current consumption: 60 mA

Temp. coefficient: ±0.015 %/°C

(±0.03 %/°C with 0 ~ 50 mV range)

Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 1500 V AC @ 1 minute (input 1 to input 2 to input 3 to input 4 to internal bus or internal power)

2000 V AC @ 1 minute (power input to FG; isolated on the power supply module)

Conversion accuracy

RANGE	RATE	80 msec.	40 msec.	20 msec.	10 msec.
-100 – +100mV		±0.05%	±0.1%	±0.2%	±0.4%
-60 – +60mV		±0.05%	±0.1%	±0.2%	±0.4%
-50 – +50mV		±0.05%	±0.1%	±0.2%	±0.4%
0 – 100mV		±0.05%	±0.1%	±0.2%	±0.4%
0 – 60mV		±0.1%	±0.2%	±0.4%	±0.8%
0 – 50mV		±0.1%	±0.2%	±0.4%	±0.8%

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

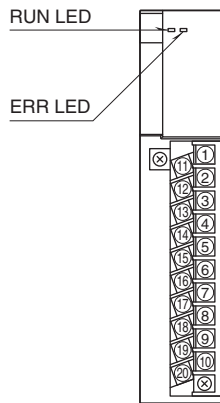
EMS EN 61000-6-2

RoHS Directive

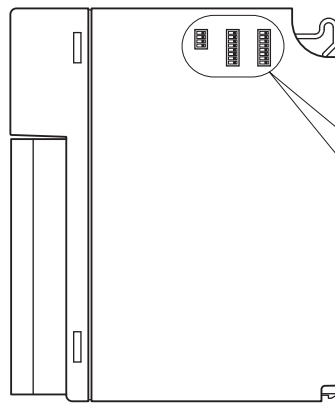
EN 50581

EXTERNAL VIEW

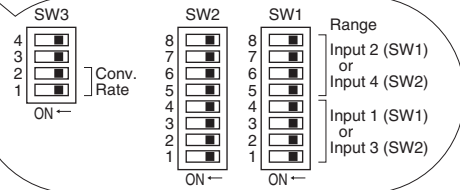
■ FRONT VIEW



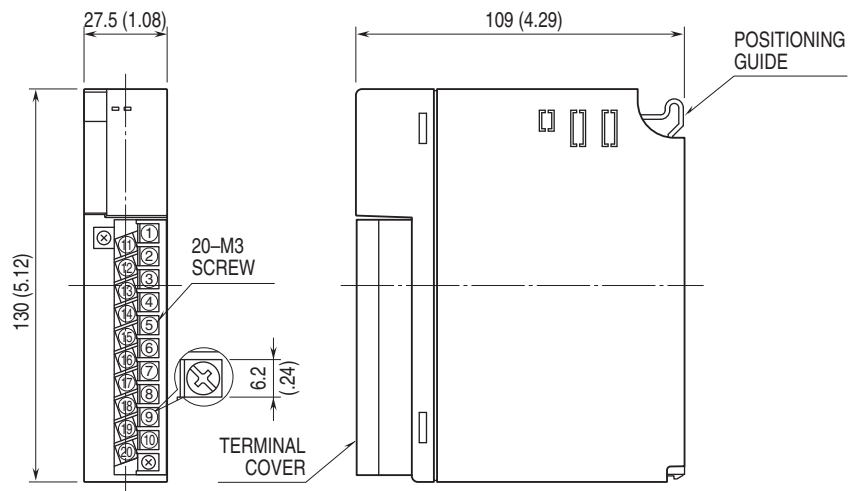
■ SIDE VIEW



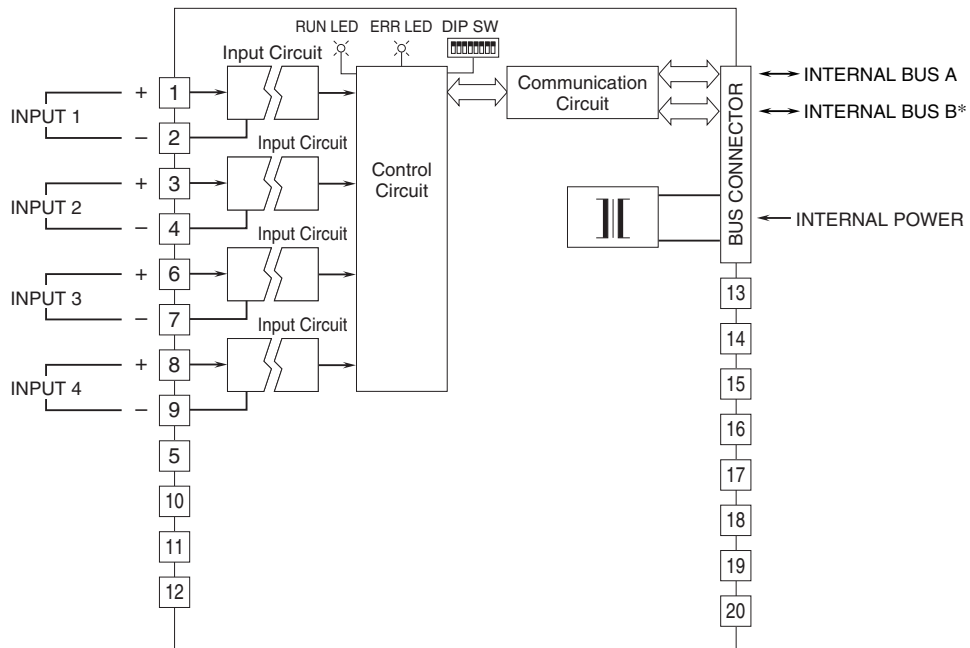
Functions



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.
DO NOT connect external wiring to the unused terminals.



Specifications are subject to change without notice.