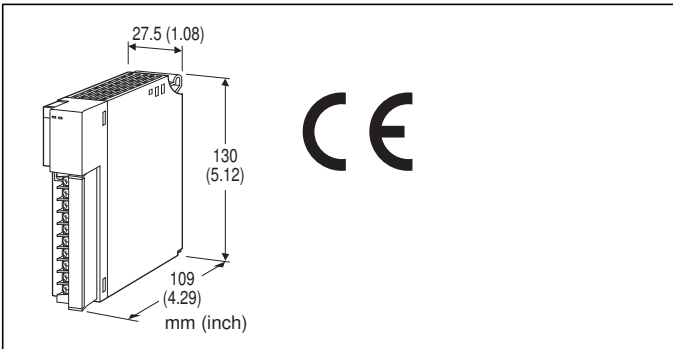


## Remote I/O R3 Series

### 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 [1] and [2].  
(e.g. R3-SV4AW/CE/Q)
- Specify the specification for option code /Q  
(e.g. /C01/SET)

#### NO. OF CHANNELS

4: 4

#### [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 -100 - +100 mV range. Otherwise, set them as "Unused" with PC Configurator software: R3CON. Unused channels left open with other settings may be equal to the input lower than -15 %, which sets a data abnormality at the PLC or the host device.

#### 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 the 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

### CE conformity:

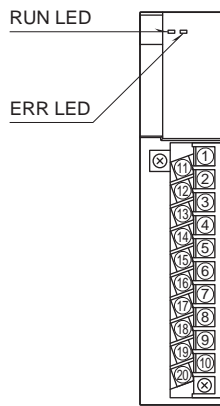
EMC Directive (2004/108/EC)

EMI EN 61000-6-4: 2007/A1: 2011

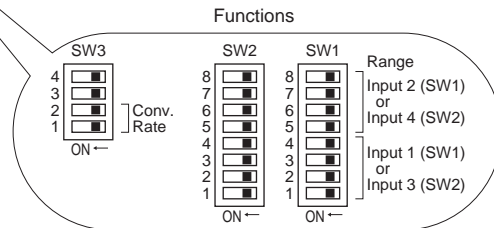
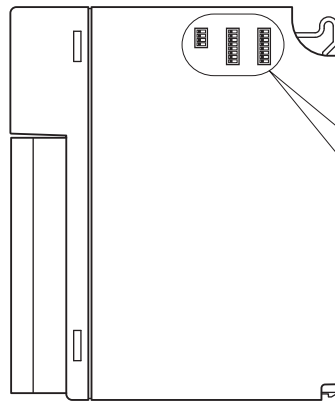
EMS EN 61000-6-2: 2005

## EXTERNAL VIEW

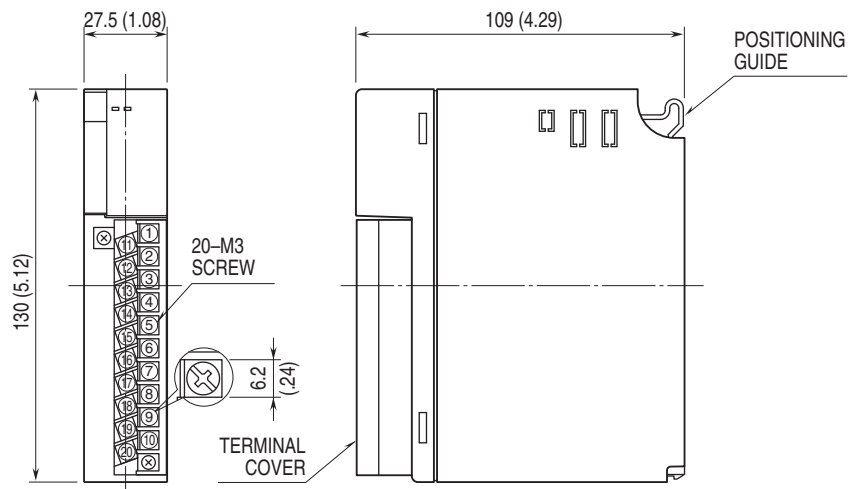
### FRONT VIEW



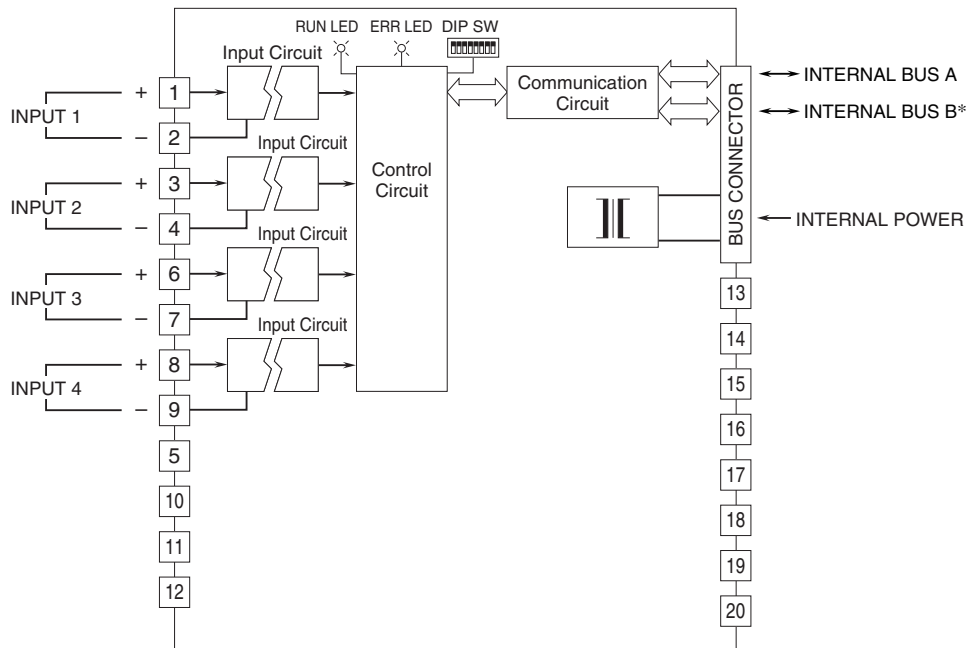
### SIDE VIEW



## 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.