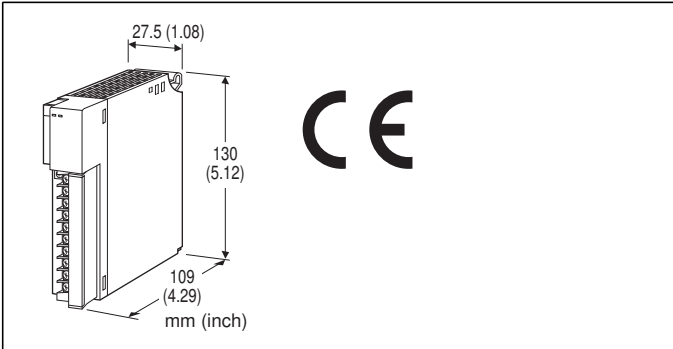


Remote I/O R3 Series

DC CURRENT INPUT MODULE

(8 points, non-isolated)



MODEL: R3-SS8N[1][2]

ORDERING INFORMATION

- Code number: R3-SS8N[1][2]
Specify a code from below for each [1] and [2].
(e.g. R3-SS8NW/CE/Q)
- Specify the specification for option code /Q
(e.g. /C01/SET)

NO. OF CHANNELS

8: 8

ISOLATION

N: Non-isolated between inputs

[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-8406)

CAUTION

■ UNUSED INPUT CHANNELS

Unused channels can be specified and set so on the PC Configurator Software (model: 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 or input 2 or input 3 or input 4 or input 5 or input 6 or input 7 or input 8 to internal bus or internal power

Conversion rate: 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;

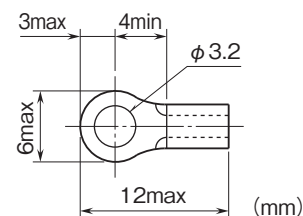
Amber when both buses operate normally.

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

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

Green in normal operating conditions.

■ Recommended solderless terminal size - M3 (unit: mm)



INPUT SPECIFICATIONS

■ DC Current: 4 - 20 mA DC

Input resistance: 250 Ω resistor incorporated

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: 160 / 80 / 40 / 20 msec. selectable



Data range: 0 - 10000
Data allocation: 8
Current consumption: 60 mA
Temp. coefficient: $\pm 0.02\%$ / °C ($\pm 0.01\%$ / °F)
Response time: ≤ 0.2 sec. (0 - 90 %)
Insulation resistance: $\geq 100\text{ M}\Omega$ with 500 V DC
Dielectric strength: 1500 V AC @ 1 minute
 (input 1 or input 2 or input 3 or input 4 or input 5 or input 6
 or input 7 or input 8 to internal bus or internal power)
 2000 V AC @ 1 minute (power input to FG; isolated on the
 power supply module)

Conversion accuracy

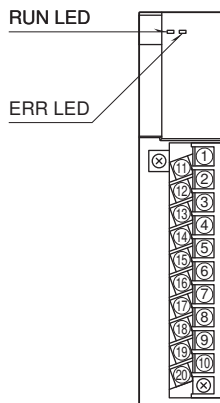
RANGE \ RATE	160 msec.	80 msec.	40 msec.	20 msec.
4 - 20mA	$\pm 0.05\%$	$\pm 0.1\%$	$\pm 0.2\%$	$\pm 0.4\%$

STANDARDS & APPROVALS

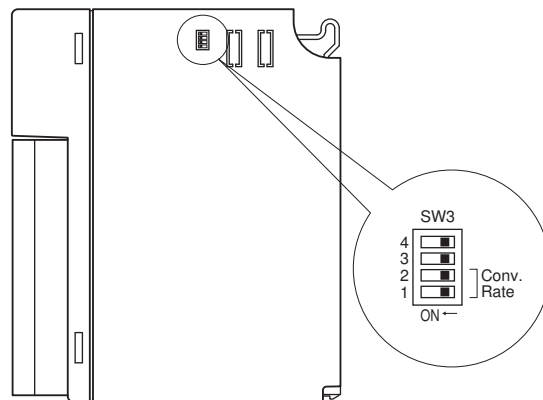
CE conformity:
 EMC Directive (2004/108/EC)
 EMI EN 61000-6-4: 2007/A1: 2011
 EMS EN 61000-6-2: 2005

EXTERNAL VIEW

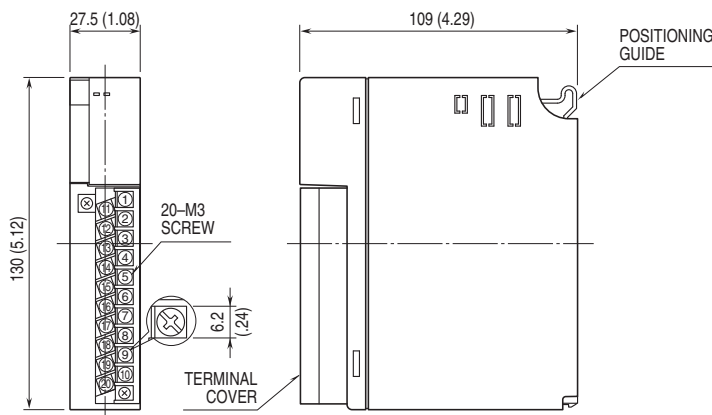
FRONT VIEW



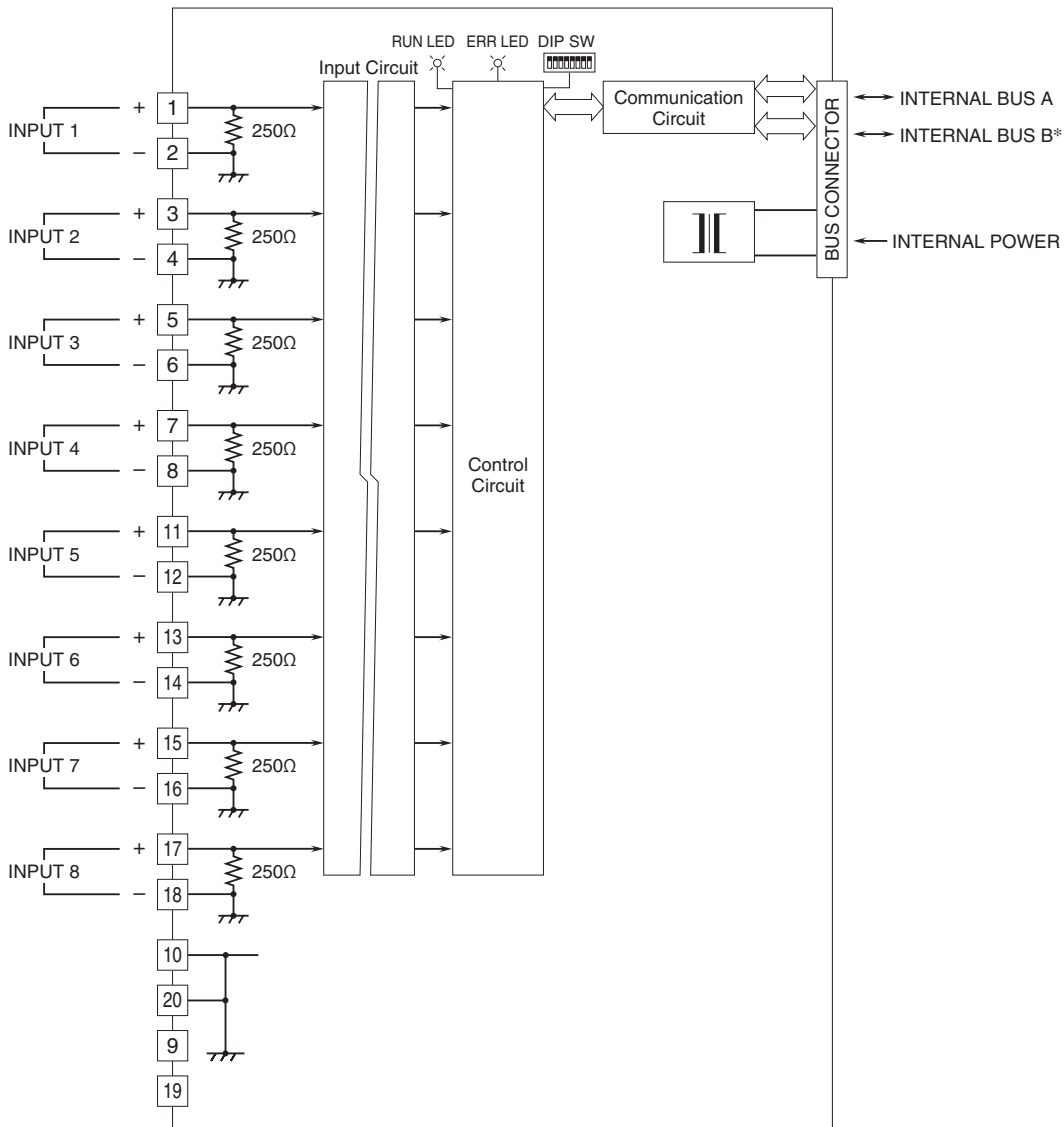
SIDE VIEW



EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.



Specifications are subject to change without notice.

