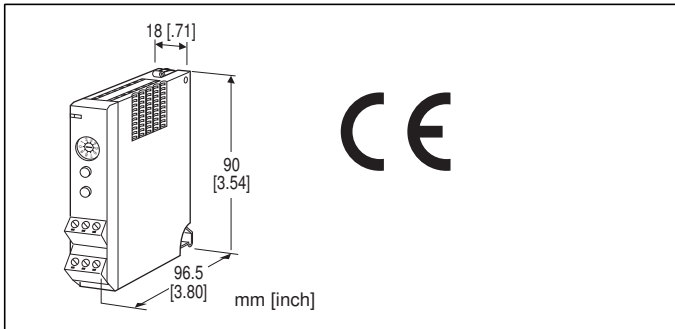


## Remote I/O R5 Series

### DC CURRENT INPUT MODULE

(re-transmitted output)



### MODEL: R5-SS1A[1][2]

#### ORDERING INFORMATION

- Code number: R5-SS1A[1][2]
- Specify a code from below for each of [1] and [2].  
(e.g. R5-SS1AW/Q)
- Specify the specification for option code /Q  
(e.g. /C01)

#### NO. OF CHANNELS

1: 1 channel

#### OUTPUT

##### Current

A: 4 - 20 mA DC (Load resistance 600  $\Omega$  max.)

#### [1] COMMUNICATION MODE

S: Single  
W: Dual

#### [2] 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
- /C03: Rubber coating

#### GENERAL SPECIFICATIONS

##### Connection

**Internal bus:** Via the Installation Base (model: R5-BS)

**I/O:** Euro type connector terminal  
(Applicable wire size: 0.2 - 2.5 mm<sup>2</sup> (AWG24 - 12),  
stripped length 7 mm)

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

**Isolation:** Input to output to internal bus or internal power  
**Zero/Span adj. mode selector:** Rotary switch; monitor mode,  
adj. mode and simulated output mode selectable

**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.

#### INPUT SPECIFICATIONS

- **Narrow Span:** -1 - +1 mA, 0 - 1 mA DC  
**Input resistance:** 2000  $\Omega$  resistor incorporated
- **Wide Span:** -40 - +40 mA, -20 - +20 mA 0 - 40 mA,  
0 - 20 mA, 4 - 20 mA DC  
**Input resistance:** 50  $\Omega$  resistor incorporated

#### OUTPUT SPECIFICATIONS

**Operational range:** Approx. 0 - 24 mA DC

#### 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:** 100 g (0.22 lb)

#### PERFORMANCE

##### Conversion accuracy

**Input:**  $\pm 0.1$  %

**Output:**  $\pm 0.1$  % of the retransmitted range + input  
conversion accuracy

**Data range:** 0 - 10000 of the input range

**Data allocation:** 1

##### Temp. coefficient

**Input:**  $\pm 0.015$  %/°C ( $\pm 0.008$  %/°F)

**Output:**  $\pm 0.02$  %/°C ( $\pm 0.01$  %/°F)

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

**Insulation resistance:**  $\geq 100$  M $\Omega$  with 500 V DC

**Dielectric strength:** 1500 V AC @ 1 minute (input to output  
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

## FUNCTIONS

### • Zero/Span Adjustment Modes

#### Monitor Mode

Re-transmits the input signal as output in proportion.

#### Output 0 % Adjustment Mode

Adjusts the 0 % output signal using the front UP/DOWN buttons, in monitoring the output value with a multimeter. SW1 through SW3 switch the internal increments by 1, 5 and 10.

#### Output 100 % Adjustment Mode

Adjusts the 100 % output signal using the front UP/DOWN buttons, in monitoring the output value with a multimeter. SW4 through SW6 switch the internal increments by 1, 5 and 10.

#### Simulated Output Mode

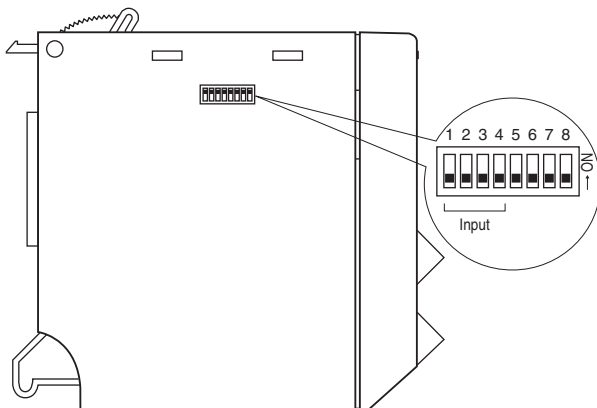
Outputs the simulated signals of 0 %, 50 % and 100 %.

### • How to Operate

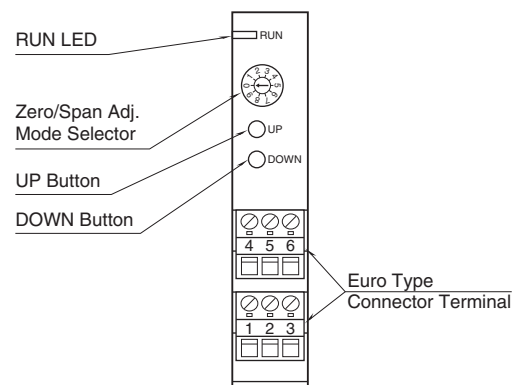
- 1) Start up in Monitor Mode (SW position = 0) and wait for 2 or 3 seconds.
- 2) Switch to another mode and go through the adjustments.
- 3) Reset the switch to the position '0' so that the new setting is stored in the internal memory.

## EXTERNAL VIEW

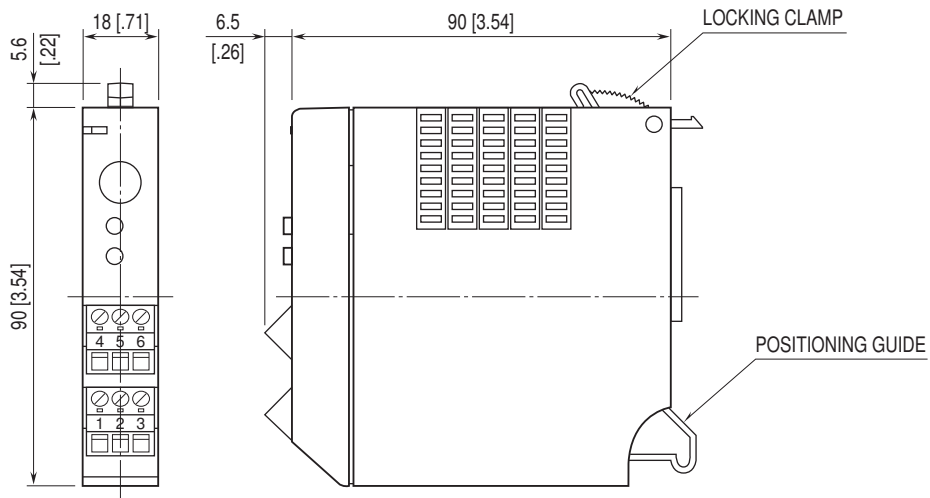
### ■ SIDE VIEW



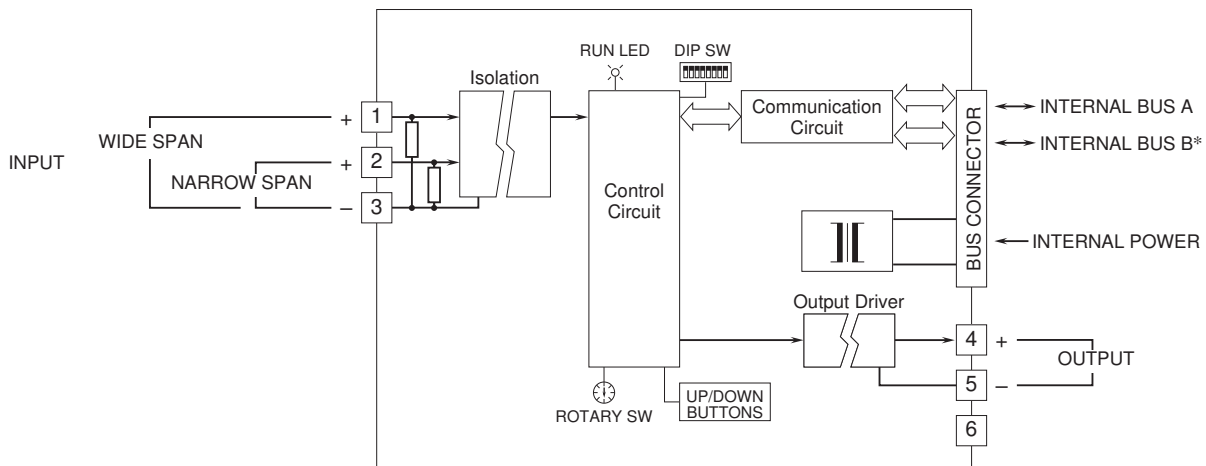
### ■ FRONT VIEW



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



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



\*For dual redundant communication.  
Note: Connect either wide or narrow span terminals for each channel.



Specifications are subject to change without notice.