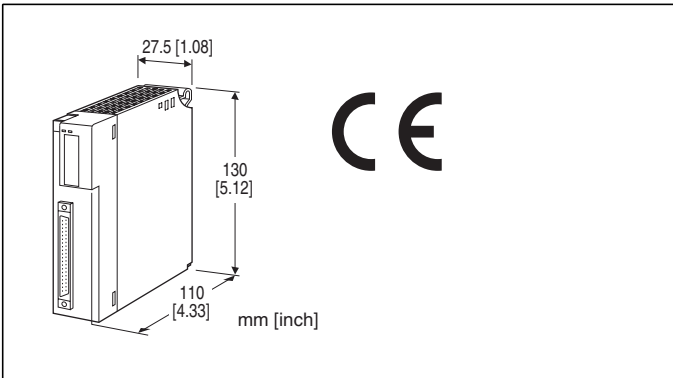


## Remote I/O R3 Series

### DC VOLTAGE INPUT MODULE

(8 points, isolated, connector type)



### MODEL: R3Y-SV8[1][2]

#### ORDERING INFORMATION

- Code number: R3Y-SV8[1][2]
- Specify a code from below for each of [1] and [2].  
(e.g. R3Y-SV8W/CE/Q)
- Specify the specification for option code /Q  
(e.g. /C01/SET)

#### NO. OF CHANNELS

8: 8

#### [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-8367)

#### CAUTION

##### ■ UNUSED INPUT CHANNELS

Set the unused channels to the ranges other than 1 - 5 V. Otherwise, set them as "Unused" with PC Configurator software: R3CON. Unused channels left open with 1 - 5 V setting are equal to the input lower than -15 %, which sets a data abnormality at the PLC or the host device.

#### RELATED PRODUCTS

- Connector terminal block (model: CNT)
- Special cable with 40-pin connector (model: FCN)

#### GENERAL SPECIFICATIONS

##### Connection

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

**Input:** 40-pin connector (OTAX N365P040AU Fujitsu FCN-365P040-AU...discontinued))

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

**Isolation:** Input 1 to input 2 to input 3 to input 4 to input 5 to input 6 to input 7 to input 8 to internal bus or internal power

**Input range:** Selectable with the side DIP SW (per 4 channels)

**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 input circuit abnormality (AD converter response failure);

Green in normal operating conditions.

#### INPUT SPECIFICATIONS

■ **Narrow Span:** -1 - +1 V, 0 - 1 V DC

**Input resistance:** 100 kΩ min.

■ **Wide Span:** -10 - +10 V, -5 - +5 V,

0 - 10 V, 0 - 5 V, 1 - 5 V DC

**Input resistance:** 1 MΩ 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:** 160 / 80 / 40 / 20 msec. selectable

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

**Data allocation:** 8

**Current consumption:** 100 mA

**Temp. coefficient:**  $\pm 0.015\% / ^\circ\text{C}$  ( $\pm 0.008\% / ^\circ\text{F}$ )

( $\pm 0.03\% / ^\circ\text{C}$  [ $\pm 0.02\% / ^\circ\text{F}$ ] with 0 - 5 V or 1 - 5 V range)

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

**Dielectric strength:** 500 V AC @ 1 minute (input 1 to input 2 to input 3 to input 4 to input 5 to input 6 to input 7 to 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.
All ranges		$\pm 0.1\%$	$\pm 0.2\%$	$\pm 0.4\%$	$\pm 0.8\%$

## STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

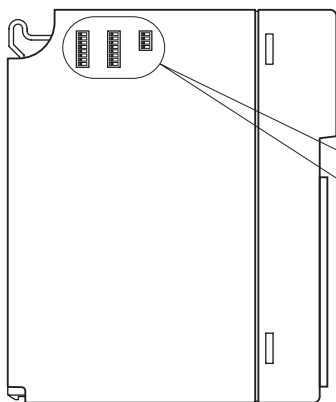
EMI EN 61000-6-4

EMS EN 61000-6-2

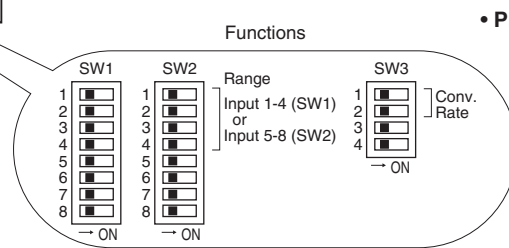
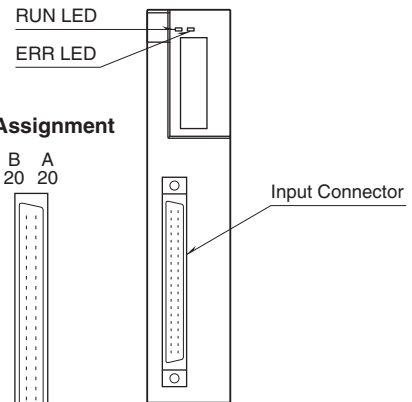
RoHS Directive

## EXTERNAL VIEW

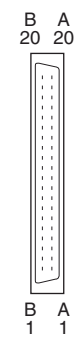
■ SIDE VIEW



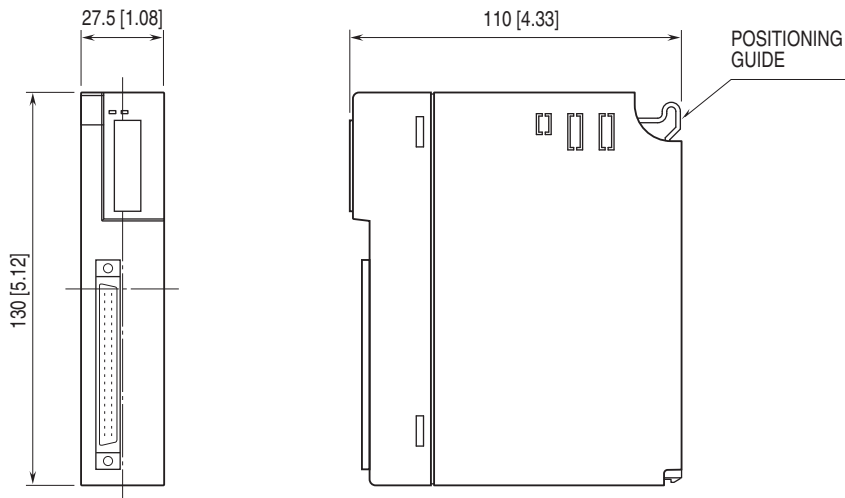
■ FRONT VIEW



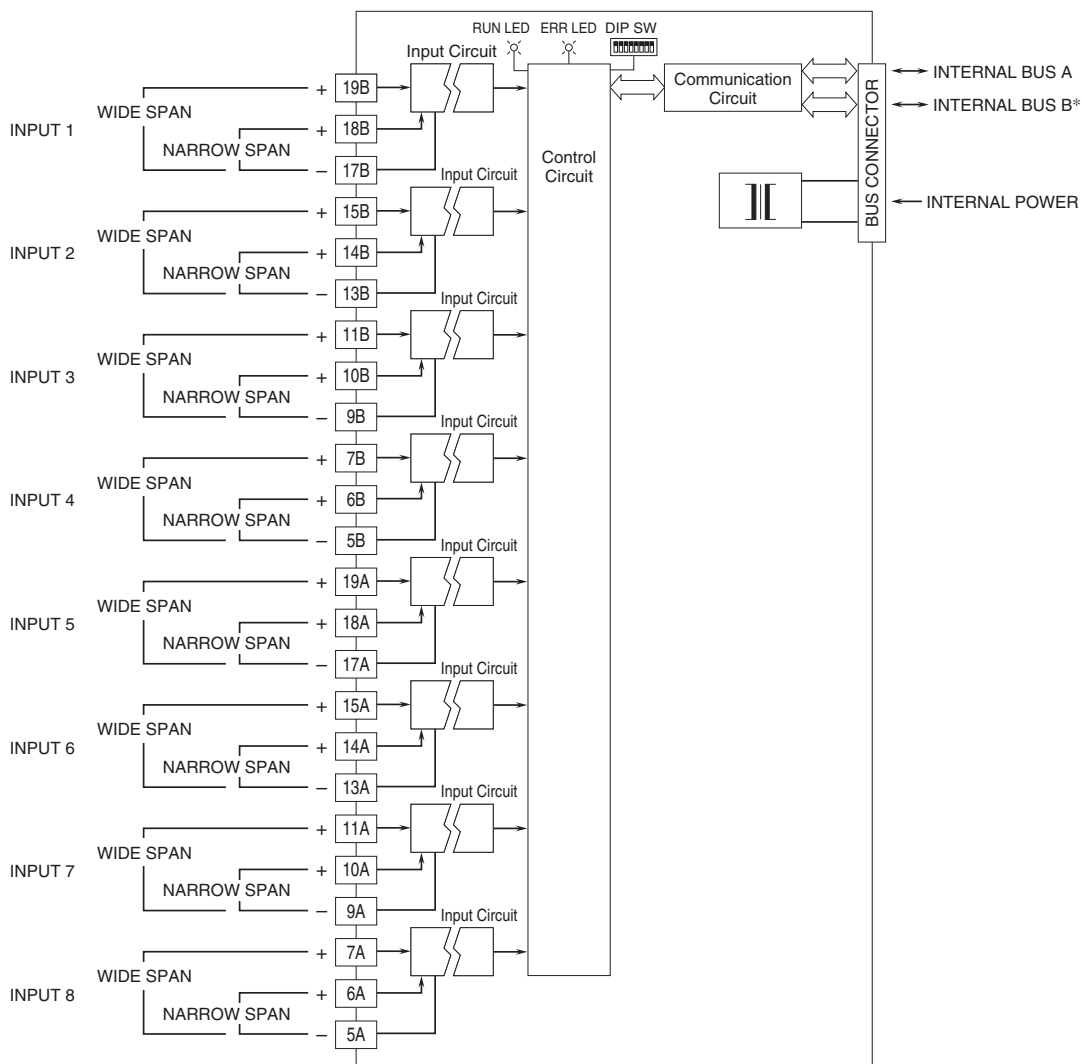
• Pin Assignment



## EXTERNAL DIMENSIONS unit: mm [inch]



## SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



\* For dual redundant communication.

Note: Connect either wide or narrow span terminals to each channel.

**INPUT CONNECTOR (40-pin)**

PIN No.	ASSIGNMENT	PIN No.	ASSIGNMENT
1A	NC	1B	NC
2A	NC	2B	NC
3A	NC	3B	NC
4A	NC	4B	NC
5A	-IN8	5B	-IN4
6A	+IN8L	6B	+IN4L
7A	+IN8H	7B	+IN4H
8A	NC	8B	NC
9A	-IN7	9B	-IN3
10A	+IN7L	10B	+IN3L
11A	+IN7H	11B	+IN3H
12A	NC	12B	NC
13A	-IN6	13B	-IN2
14A	+IN6L	14B	+IN2L
15A	+IN6H	15B	+IN2H
16A	NC	16B	NC
17A	-IN5	17B	-IN1
18A	+IN5L	18B	+IN1L
19A	+IN5H	19B	+IN1H
20A	NC	20B	NC



Specifications are subject to change without notice.