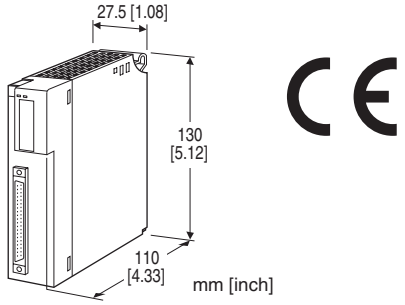
Remote I/O R3 Series

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 otherthan 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 (Fujitsu FCN-365P040-AU)

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: ±0.015 % /°C (±0.008 %/°F)
(±0.03 % /°C [±0.02 %/°F] with 0 – 5 V or 1 – 5 V range)
Insulation resistance: ≥ 100 MΩ 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

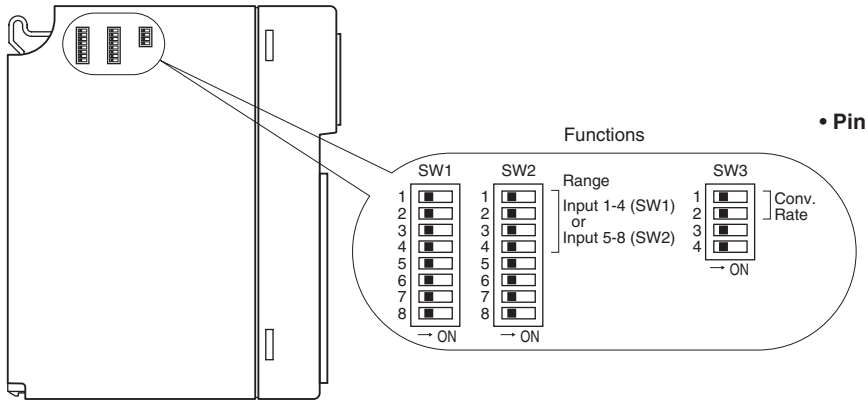
RANGE \ RATE	160 msec.	80 msec.	40 msec.	20 msec.
All ranges	±0.1%	±0.2%	±0.4%	±0.8%

STANDARDS & APPROVALS

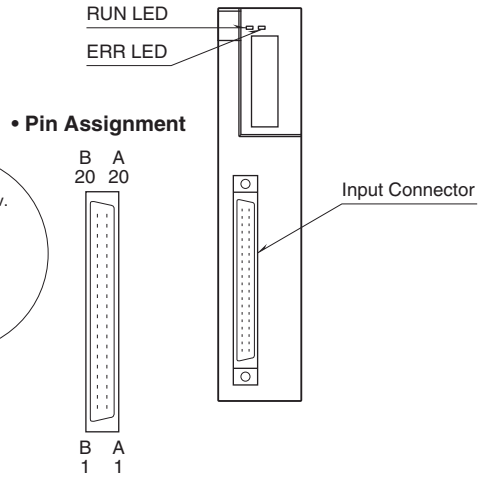
EU conformity:
EMC Directive
EMI EN 61000-6-4
EMS EN 61000-6-2
RoHS Directive

EXTERNAL VIEW

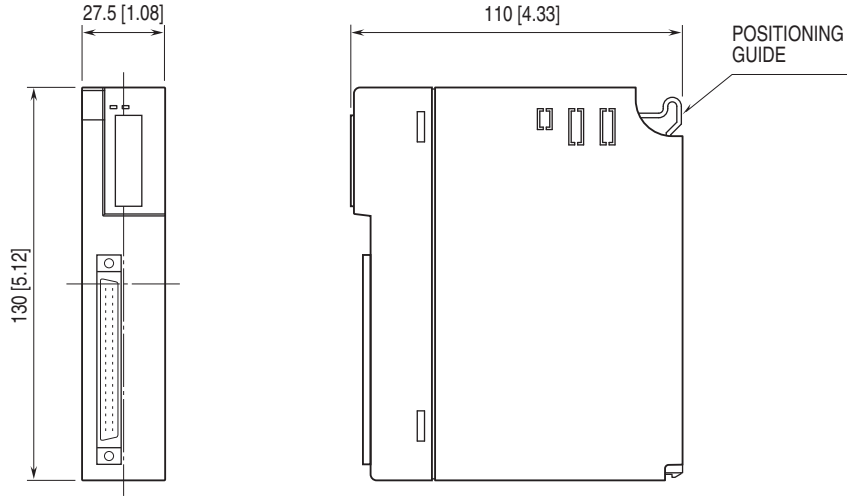
■ **SIDE VIEW**



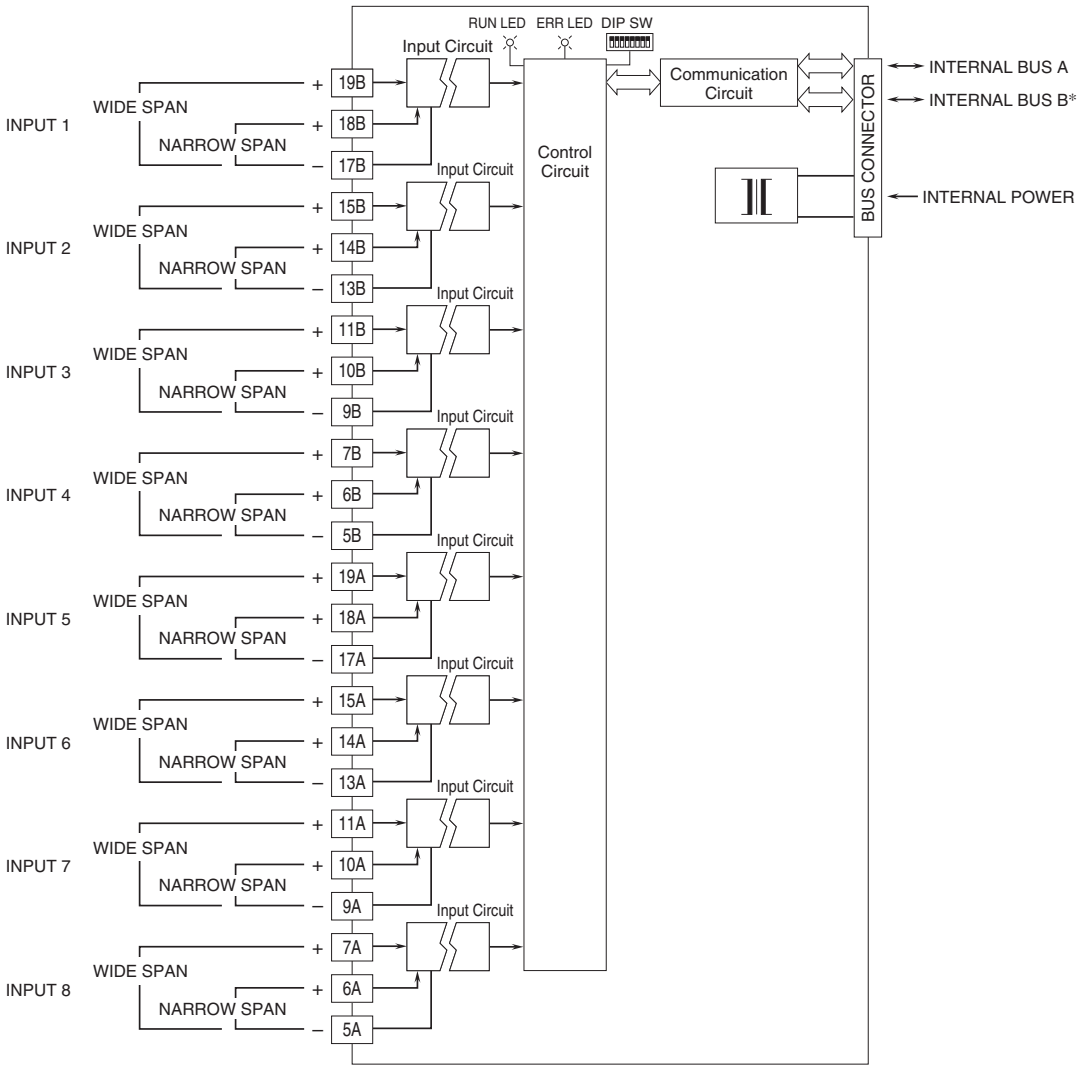
■ **FRONT VIEW**



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.