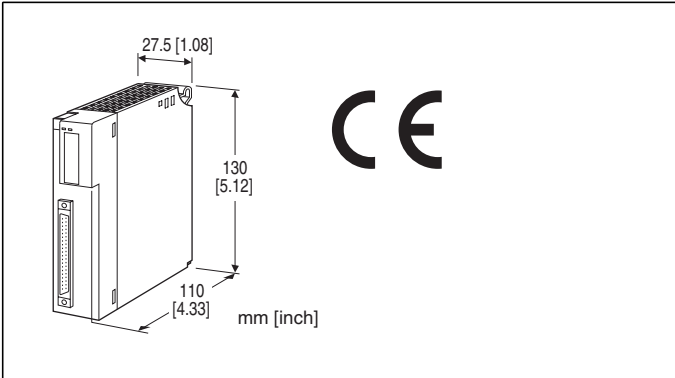


Remote I/O R3 Series

DC VOLTAGE INPUT MODULE

(16 points, non-isolated, connector type)



MODEL: R3Y-SV16N[1][2]

ORDERING INFORMATION

- Code number: R3Y-SV16N[1][2]
Specify a code from below for each of [1] and [2].
(e.g. R3Y-SV16NW/CE/Q)
- Specify the specification for option code /Q
(e.g. /C01/SET)

NO. OF CHANNELS

16: 16

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-8404)

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 to internal bus or internal power

Input range: Selectable with the side DIP SW (per 8 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

Input: -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: 100 / 50 / 20 / 10 msec. selectable

Data range: 0 - 10000 of the input range

Data allocation: 16

Current consumption: 100 mA

Temp. coefficient: $\pm 0.015\%$ /°C ($\pm 0.008\%$ /°F)

($\pm 0.03\%$ /°C [$\pm 0.02\%$ /°F] with 0 - 5 V or 1 - 5 V range)

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

Dielectric strength: 1500 V AC @ 1 minute

(input 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	100 msec.	50 msec.	20 msec.	10 msec.
-10 - +10V	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$
-5 - +5V	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$
0 - 10V	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$
0 - 5V	$\pm 0.2\%$	$\pm 0.2\%$	$\pm 0.2\%$	$\pm 0.2\%$
1 - 5V	$\pm 0.2\%$	$\pm 0.2\%$	$\pm 0.2\%$	$\pm 0.2\%$

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

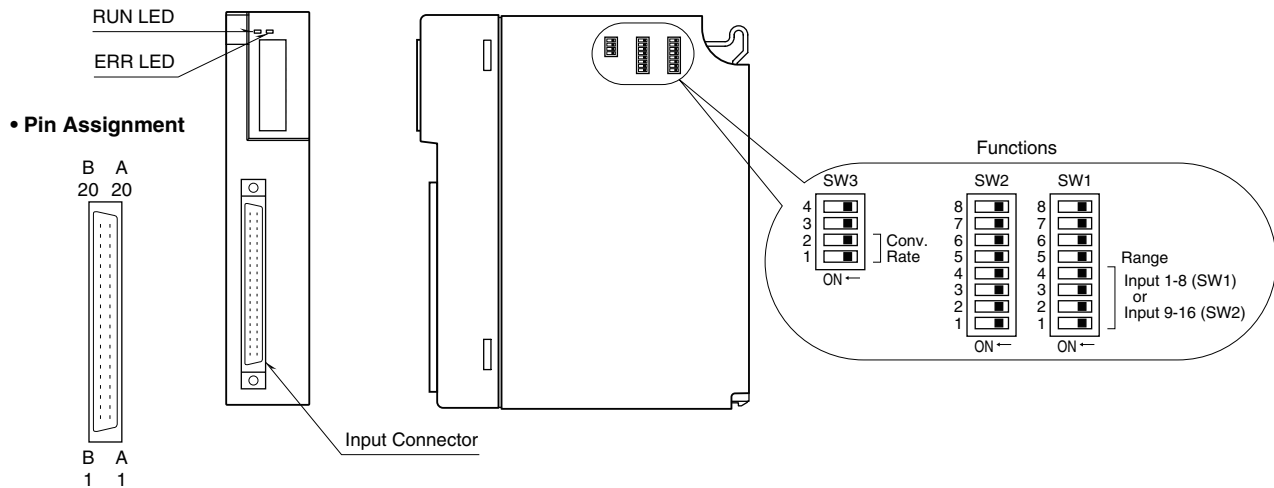
EMS EN 61000-6-2

RoHS Directive

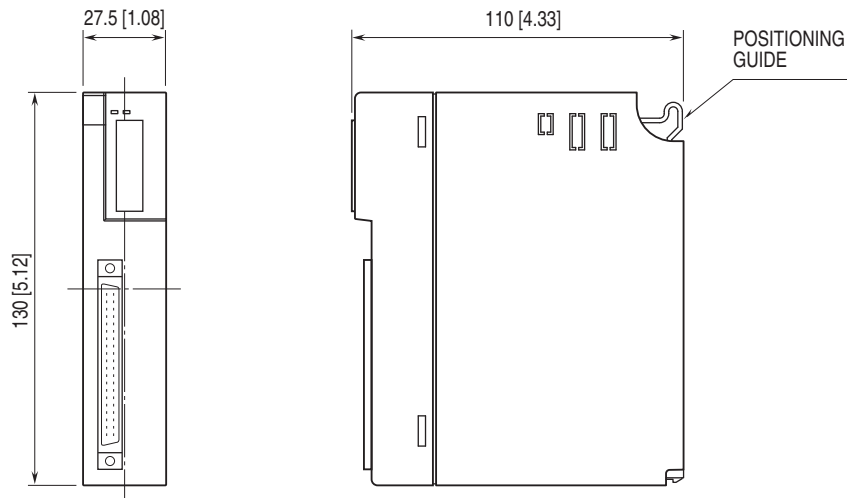
EXTERNAL VIEW

■ FRONT VIEW

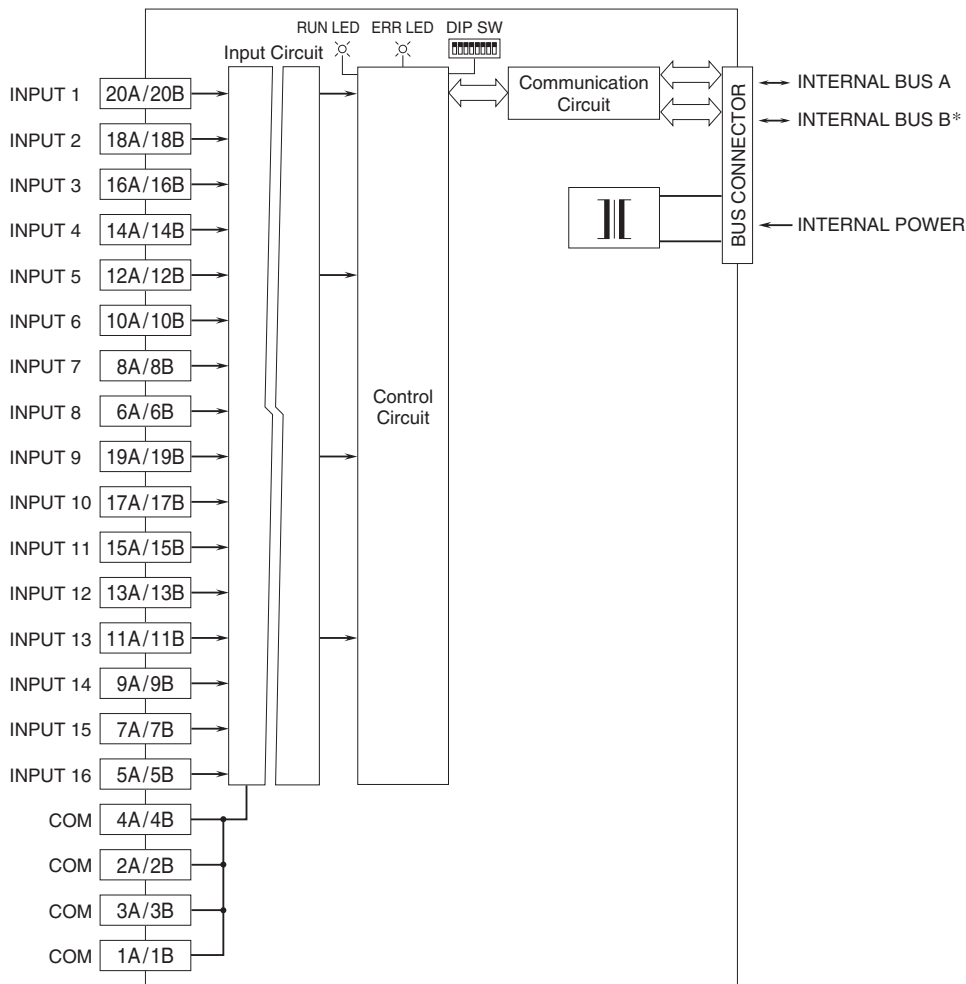
■ SIDE VIEW



EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



INPUT CONNECTOR (40-pin)

PIN NO.	ASSIGNMENT	PIN NO.	ASSIGNMENT
1A	COM	1B	COM
2A	COM	2B	COM
3A	COM	3B	COM
4A	COM	4B	COM
5A	IN16	5B	IN16
6A	IN8	6B	IN8
7A	IN15	7B	IN15
8A	IN7	8B	IN7
9A	IN14	9B	IN14
10A	IN6	10B	IN6
11A	IN13	11B	IN13
12A	IN5	12B	IN5
13A	IN12	13B	IN12
14A	IN4	14B	IN4
15A	IN11	15B	IN11
16A	IN3	16B	IN3
17A	IN10	17B	IN10
18A	IN2	18B	IN2
19A	IN9	19B	IN9
20A	IN1	20B	IN1



Specifications are subject to change without notice.