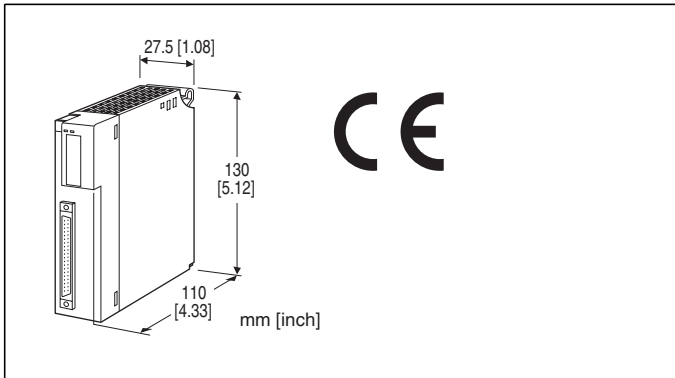


Remote I/O R3 Series

DC VOLTAGE OUTPUT MODULE

(8 points, isolated, connector type)



MODEL: R3Y-YV8[1][2]

ORDERING INFORMATION

- Code number: R3Y-YV8[1][2]
- Specify a code from below for each of [1] and [2].
(e.g. R3Y-YV8W/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-8396)

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)

Output: 40-pin connector (Fujitsu FCN-365P040-AU)

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

Isolation: Output 1 to output 2 to output 3 to output 4 to output 5 to output 6 to output 7 to output 8 to internal bus or internal power

Output range: Selectable with the side DIP SW per 4 points

Output hold function: Setting for communication error with 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: Green LED turns on in normal operating conditions.

OUTPUT SPECIFICATIONS

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

Load resistance: 10 kΩ min.

■ **Wide Span:** -10 - +10 V, -5 - +5 V, 0 - 10 V, 0 - 5 V, 1 - 5 V DC

Load resistance: 10 kΩ min.

■ **Output Range**

Except -10 to +10 V DC: -15 to +115 % of output range

-10 to +10 V DC: Approx. -11.5 to +11.5 V 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: R3-BSx)

Weight: 250 g (0.55 lb)

PERFORMANCE

Conversion accuracy: ±0.1 %

(±0.2 % with 0 - 5 V or 1 - 5 V range)

Data range: 0 - 10000 of the output range

Data allocation: 8

Current consumption: 200 mA

Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)

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

Response time: ≤ 0.2 sec. (0 - 90 %)

Insulation resistance: ≥ 100 MΩ with 500 V DC

Dielectric strength: 1000 V AC @ 1 minute
 (output 1 to output 2 to output 3 to output 4 to output 5 to output 6 to output 7 to output 8 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

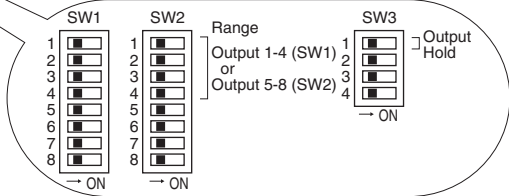
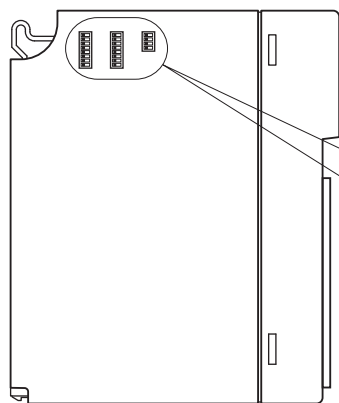
■ OUTPUT HOLD or OUTPUT OFF
 In normal conditions, the module outputs the signal from the preferred bus A. When an error is detected, the output is switched to the data from the bus B.

- **Output Hold**
 If both are in error, the module holds the signal and stands by until one of the communications recovers.
- **Output OFF**
 If both are in error, the module outputs -15 % (or approx. -11.5 V) and stands by until one of the communications recovers.

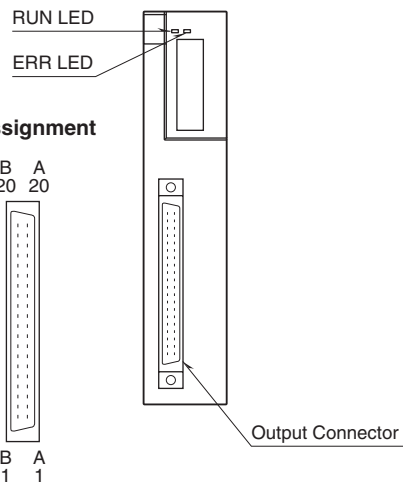
At the startup, it outputs -15 % (or approx. -11.5 V) until the communication is established and normal data is received.

EXTERNAL VIEW

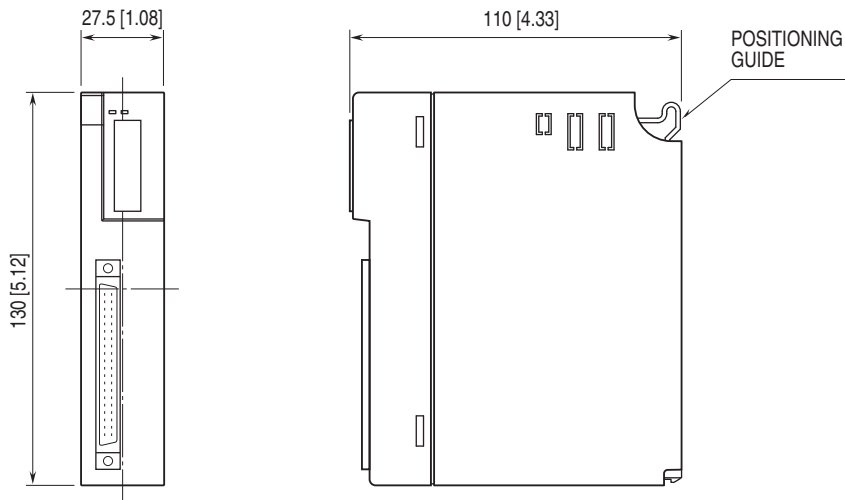
■ SIDE VIEW



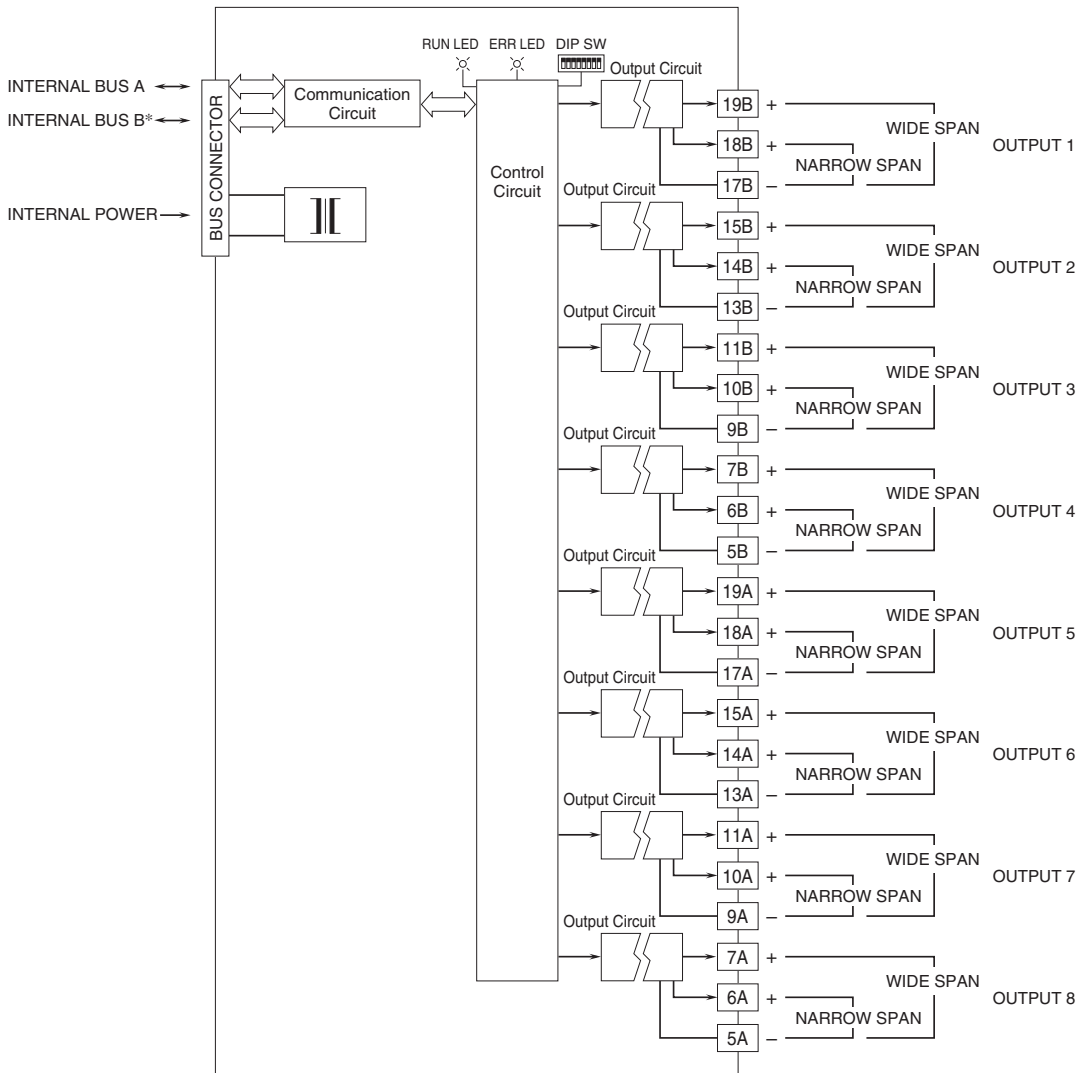
■ FRONT VIEW



EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*For dual redundant communication.

NOTE: Connect either wide or narrow span terminals for each channel.

OUTPUT 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	- OUT8	5B	- OUT4
6A	+ OUT8L	6B	+ OUT4L
7A	+ OUT8H	7B	+ OUT4H
8A	NC	8B	NC
9A	- OUT7	9B	- OUT3
10A	+ OUT7L	10B	+ OUT3L
11A	+ OUT7H	11B	+ OUT3H
12A	NC	12B	NC
13A	- OUT6	13B	- OUT2
14A	+ OUT6L	14B	+ OUT2L
15A	+ OUT6H	15B	+ OUT2H
16A	NC	16B	NC
17A	- OUT5	17B	- OUT1
18A	+ OUT5L	18B	+ OUT1L
19A	+ OUT5H	19B	+ OUT1H
20A	NC	20B	NC



Specifications are subject to change without notice.