

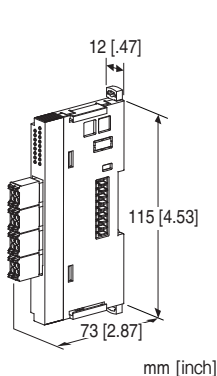
Remote I/O R8 Series

DC VOLTAGE OUTPUT MODULE

(2 points, isolated)

Functions & Features

- 2 channels for DC voltage output, compact size remote I/O module
- Output range adjustment with DIP switch or PC configurator
- Each channel is attachable/detachable independently with separable tension clamp terminal



MODEL: R8-YVT2[1]

ORDERING INFORMATION

- Code number: R8-YVT2[1]
Specify a code from below for [1].
(e.g. R8-YVT2/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to our web site.)

/C01: Silicone coating

/C02: Polyurethane coating

RELATED PRODUCTS

- PC Configurator cable (model: MCN-CON or COP-US)
 - PC configurator software (model: R8CFG)
- Downloadable at our web site.

GENERAL SPECIFICATIONS

Connection

- **Output:** Separable tension clamp terminal
- **Excitation supply, internal bus:**
Connected to internal bus connector
- **Internal power:** Via bus connector

Isolation: Output 1 to output 2 to exc. supply to internal bus or internal power**Output range:** Selectable with the side DIP SW**Module address:** With rotary switch**Output at the loss of communication:** Selectable with the side DIP SW**Terminating resistor:** Built-in (DIP Switch, default: disable)**Configuration mode:** With DIP switches on the side panel**Status indicator:** Bi-color (red/green) LED; Refer to the instruction manual.**Output status indicators:** Red LED; Refer to the instruction manual.

OUTPUT

Output range: Selectable between -10 - +10 V DC**Operational range:** -5 - +105 % (in percentage of output range)**Load resistance:** $\geq 5 \text{ k}\Omega$

INSTALLATION

Max. current consumption: 160 mA**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:** DIN rail**Weight:** 70 g (2.5 oz)

PERFORMANCE

Conversion accuracy (in percentage of output range)

 $\pm 0.1 \%$ (@ output range -10 - +10 V)

Conversion accuracy is inversely proportional to output span.

Conversion accuracy computation example:

When output range is 1 - 5 V: conversion accuracy =
output span standard value (20 V) $\div$ output span (4 V) $\times$
0.1(%) = 0.5 (%).

output span standard value is the same as the span at
output range -10 - +10 V DC.

Conversion rate: 4 msec.**Output circuit time constant:** $\leq 5 \text{ msec.}$ (0 $\rightarrow$ 90 %)**Data range:** 0 - 10000 of the output range**Data allocation:** 2**Module addresses in use:** 1**Temp. coefficient:** $\pm 0.015 \text{ } \%/^{\circ}\text{C}$ ($\pm 0.008 \text{ } \%/^{\circ}\text{F}$)**Insulation resistance:** $\geq 100 \text{ M}\Omega$ with 500 V DC

Dielectric strength:

1500 V AC @ 1 min. (output 1 to output 2 to exc. supply to internal bus or internal power to ground)

STANDARDS & APPROVALS

EU conformity:

EMC Directive

EMI EN 61000-6-4

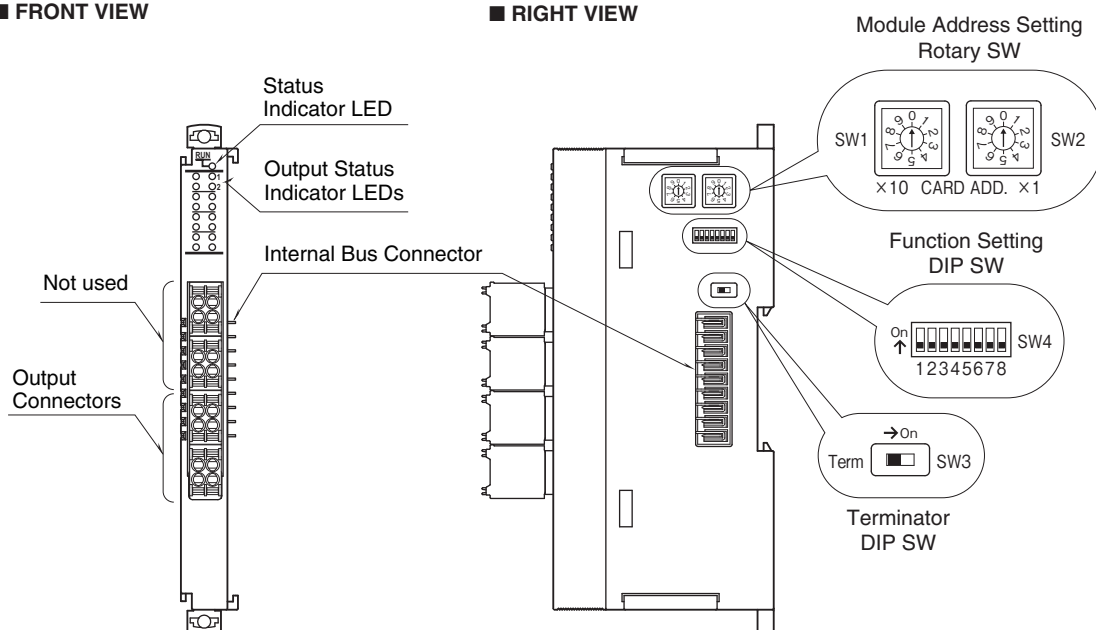
EMS EN 61000-6-2

RoHS Directive

EXTERNAL VIEW

■ FRONT VIEW

■ RIGHT VIEW



WIRING**■ SEPARABLE TENSION CLAMP TERMINAL****Unit side connector:** MG's product**Cable side connector:** DPMC1,5/2-ST-3,5 (Phoenix Contact)

(included in the package)

Applicable wire size: 0.2 - 1.5 mm²**Stripped length:** 10 mm**Recommended solderless terminal**

- AI0,25-10YE 0.25 mm² (Phoenix Contact)
- AI0,34-10TQ 0.34 mm² (Phoenix Contact)
- AI0,5-10WH 0.5 mm² (Phoenix Contact)
- AI0,75-10GY 0.75 mm² (Phoenix Contact)
- A1-10 1.0 mm² (Phoenix Contact)
- A1,5-10 1.5 mm² (Phoenix Contact)

1 NC	2 NC
3 NC	4 NC

5 NC	6 NC
7 NC	8 NC

9 Ao1	10 AG1
11 NC	12 NC

13 Ao2	14 AG2
15 NC	16 NC

PIN NO.	ID	FUNCTION
1	NC	Unused
2	NC	Unused
3	NC	Unused
4	NC	Unused
5	NC	Unused
6	NC	Unused
7	NC	Unused
8	NC	Unused
9	Ao1	Output 1 (+)
10	AG1	Output 1 (-)
11	NC	Unused
12	NC	Unused
13	Ao2	Output 2 (+)
14	AG2	Output 2 (-)
15	NC	Unused
16	NC	Unused

OPERATING MODE SETTING

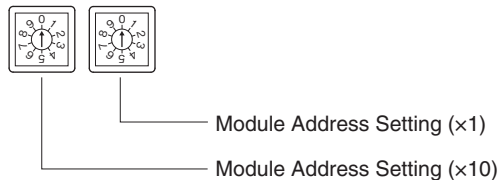
(*) Factory setting

Note: Be sure to set unused SW4-3 through 4-6 to OFF.

· MODULE ADDRESS (SW1, 2)

The left switch determines the tenth place digit, while the right switch does the ones place digit of the address.

Address is selected between 0 to 31. (Factory setting: 0)



· RANGE

Same range for all channels.

Use PC Congurator to set independent ranges per channel.

OUTPUT RANGE	SW4-1	SW4-2
-10 - +10V DC (*)	OFF	OFF
0 - 10V DC	ON	OFF
0 - 5V DC	OFF	ON
1 - 5V DC	ON	ON

· OUTPUT AT THE LOSS OF COMMUNICATION (SW4)

OUTPUT AT THE LOSS OF COMMUNICATION	SW4-7
Output Hold (*) (last data correctly received is hold)	OFF
Output Clear	ON

Note: For Stop output, output fixed at -5% when configuration mode is DIP switch setting.

Output fixed at scaling value at the loss of communication when configuration mode is PC.

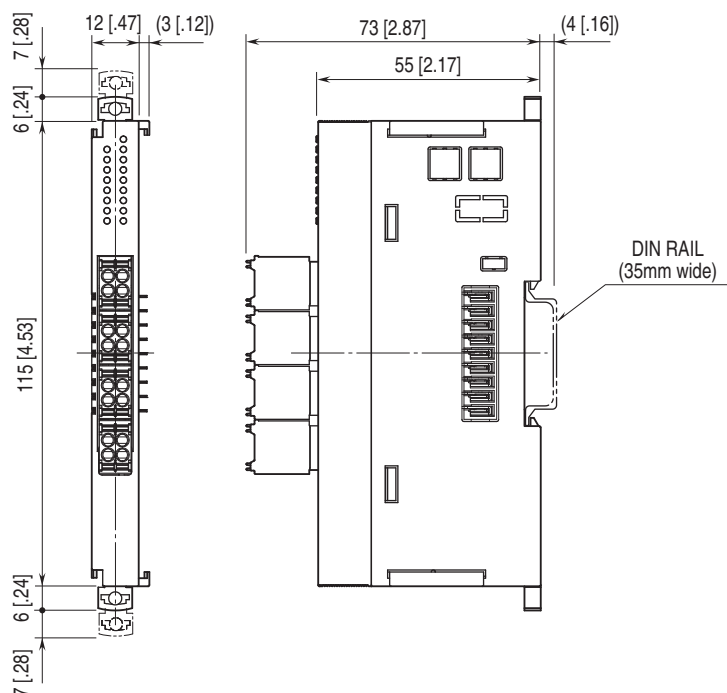
· CONFIGURATION MODE (SW4)

CONFIGURATION MODE	SW4-8
DIP SW setting (*)	OFF
PC configurator and communication	ON

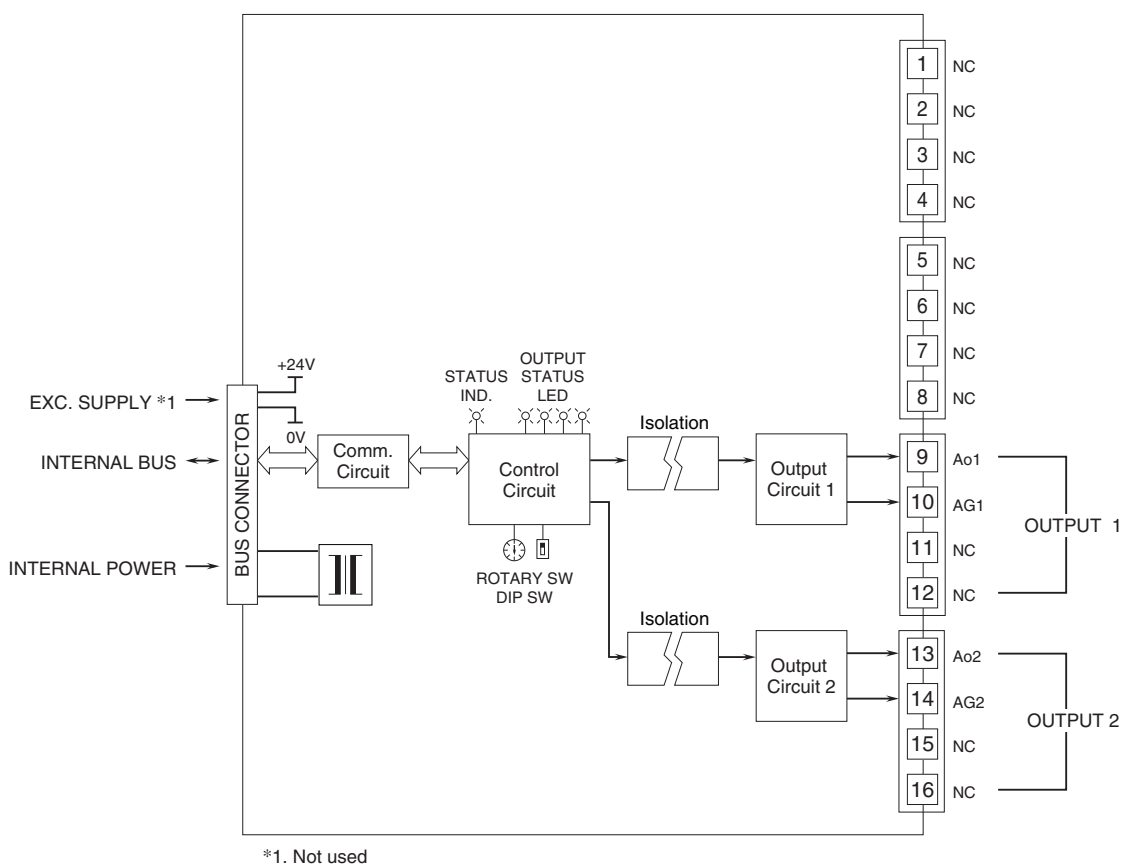
· TERMINATOR DIP SW (SW3)

TERMINATOR SW	SW3
Without (*)	OFF
With	ON

EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM





Specifications are subject to change without notice.