Remote I/O R8 Series

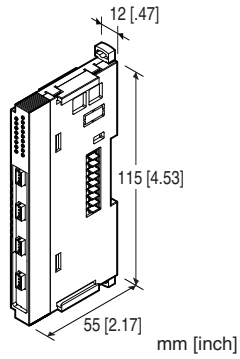
DC VOLTAGE OUTPUT MODULE

(4 points, non-isolated)

Functions & Features

• 4 channels for DC voltage output, compact size remote I/O module

• Output range adjustment with PC configurator



MODEL: R8Y-YVZH4N[1]

ORDERING INFORMATION

• Code number: R8Y-YVZH4N[1]

Specify a code from below for [1].
(e.g. R8Y-YVZH4N//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)

• ZH connector cable (model: ZHCL)
The use of this cable is not mandatory.

• PC configurator software (model: R8CFG)
Downloadable at our web site.

GENERAL SPECIFICATIONS

Connection

• **Output**: 4-pin ZH connector
Unit side connector: S4B-ZR (J.S.T. Mfg. Co., Ltd.)
Recommended socket: ZHR-4 (J.S.T. Mfg. Co., Ltd.)
Recommended contact: SZH-002T-P0.5 (J.S.T. Mfg. Co., Ltd.)
Applicable wire size: AWG28 - 26
(The socket and contact are not included in the package. Refer to the specifications of the product)

• **Excitation supply, internal bus**:
Connected to internal bus connector

• **Internal power**: Supplied from internal bus connector

Isolation: Output to exc. supply to internal bus or internal power

Output range: Selectable with PC configurator software

Module address: With DIP switch

Output at the loss of communication: Selectable with PC configurator software

Terminating resistor: Built-in (DIP Switch, default: disable)

Status indicator LED: Bi-color (red/green) LED; Refer to the instruction manual.

OUTPUT SPECIFICATIONS

Output range: Selectable between -10 – +10 V DC

Factory default: -10 – +10 V DC

Operational range: -5 – +105 % (in percentage of output range)

Load resistance: ≥ 5 kΩ

INSTALLATION

Max. current consumption: 120 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: 60 g (2.12 oz)

PERFORMANCE

Conversion accuracy (in percentage of output range)

±0.05 % (@ 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) ÷ output span (4 V) × 0.05 (%) = 0.25 (%).

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: ≤ 60 msec. (0 → 90 %)

Data range: 0 – 10000 of the output range

Data allocation: 2

Module addresses in use: 2

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

MG CO., LTD.
www.mgco.jp

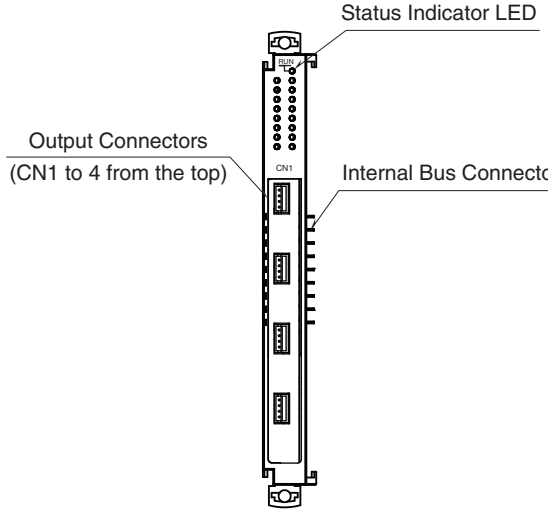
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength:
1500 V AC @ 1 minute (output to exc. supply to internal bus or internal power to ground)

STANDARDS & APPROVALS

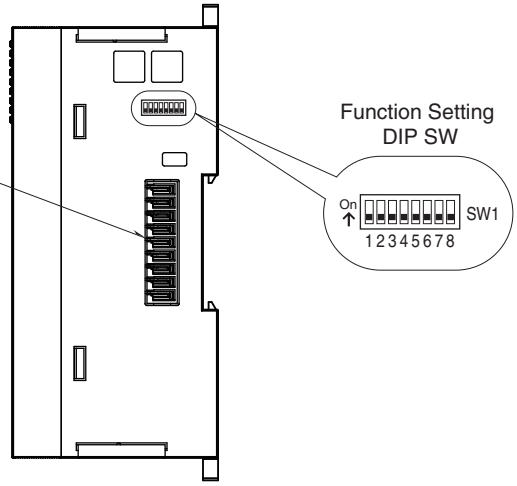
EU conformity:
EMC Directive
EMI EN 61000-6-4
EMS EN 61000-6-2
RoHS Directive

EXTERNAL VIEW

■ **FRONT VIEW**



■ **SIDE VIEW**



OPERATING MODE SETTING

(*) Factory default setting
Note: Be sure to set unused SW1-7 to OFF.

■ **MODULE ADDRESS (SW1)**

SW1-1 and SW1-2 determine the tenth place digit, while SW1-3 through 1-6 do the ones place digit of the module address.
Address is selected between 0 to 30.
(Factory setting: 0)

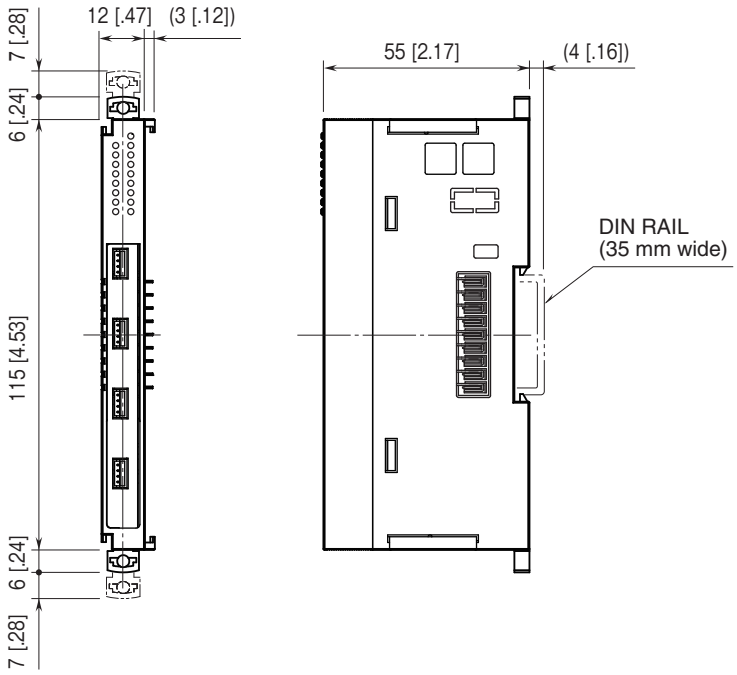
MODULE ADDRESS	SW1				
	×10			1	2
	×1	3	4	5	6
0		OFF	OFF	OFF	OFF
1		OFF	OFF	OFF	ON
2		OFF	OFF	ON	OFF
3		OFF	OFF	ON	ON
4		OFF	ON	OFF	OFF
5		OFF	ON	OFF	ON
6		OFF	ON	ON	OFF
7		OFF	ON	ON	ON
8		ON	OFF	OFF	OFF
9		ON	OFF	OFF	ON

■ **TERMINATOR (SW1)**

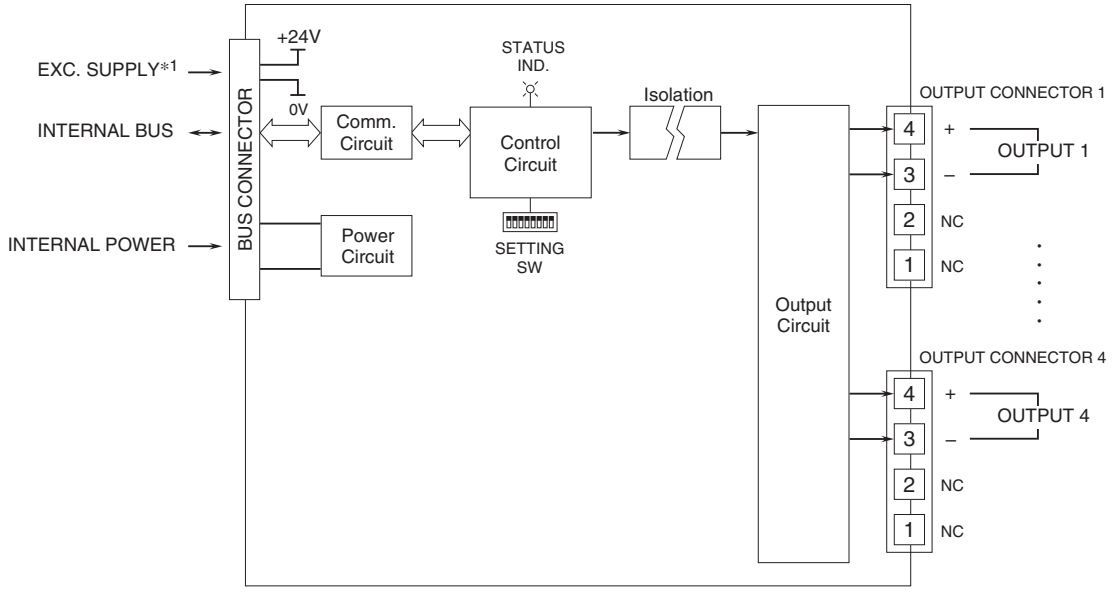
TERMINATOR	SW1-8
WIthout (*)	OFF
With	ON

MG CO., LTD.
www.mgco.jp

EXTERNAL DIMENSIONS unit: mm [inch]



SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*1. Not used.

⚠ Specifications are subject to change without notice.

MG CO., LTD.
www.mgco.jp