Remote I/O R8 Series

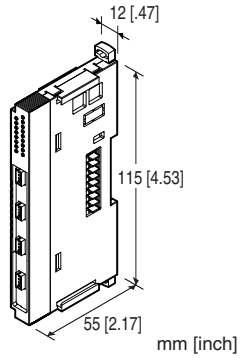
DC CURRENT INPUT MODULE

(built-in excitation, 4 points, non-isolated)

Functions & Features

• Accepts direct input from DC signal, compact size remote I/O module

• Accepts direct input from power output as sensor power and outputs from terminals



MODEL: R8Y–SSZH4NJ[1]

ORDERING INFORMATION

• Code number: R8Y–SSZH4NJ[1]

Specify a code from below for [1].
(e.g. R8Y–SSZH4NJ/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

• **Input**: 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: Input or exc. supply to internal bus or internal power

Input range: Selectable with PC configurator software

Module address: With DIP switch

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

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

INPUT SPECIFICATIONS

Input range: -20 – +20 mA DC configurable

Factory default: 4 - 20 mA DC

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

Input resistance: 30.3 Ω

INSTALLATION

Max. current consumption: 50 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 input range)

±0.1 % (@ input range -20 - +20 mA)

Conversion accuracy is inversely proportional to input span.
Conversion accuracy computation example:
When input range is 4 - 20 mA: conversion accuracy = nominal input span (40 mA) ÷ input span (16 mA) × 0.1 (%) = 0.25 (%).

Nominal input span is the same as the span at input range -20 - +20 mA DC.

Conversion rate: 25 msec.

Input circuit time constant: Approx. 1 msec.

Data range: 0 – 10000 of the input range

Data allocation: 2

Module addresses in use: 2

Power output (input connector): Rated current 0.75 A DC

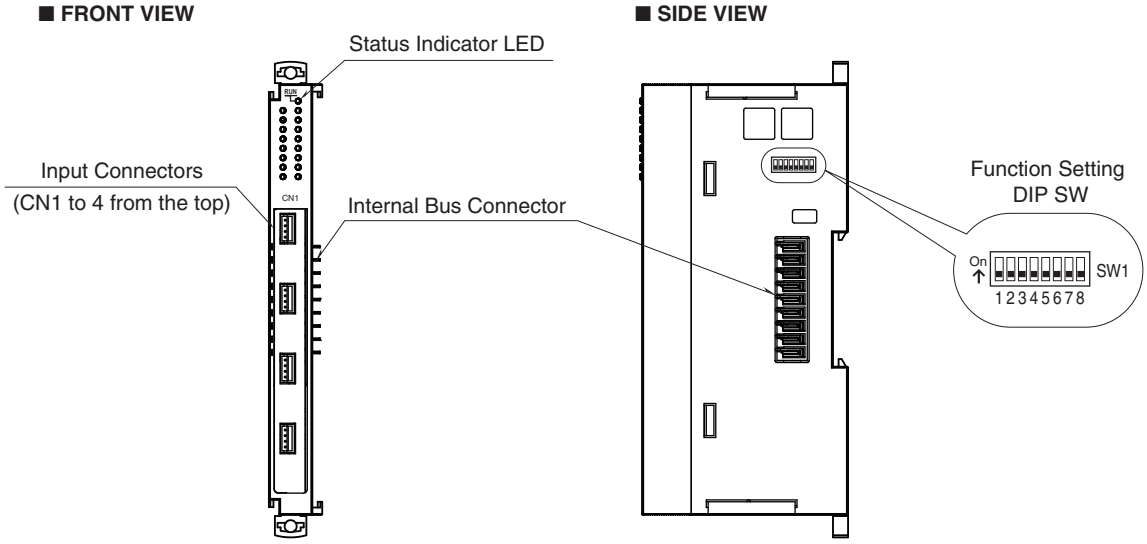
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www.mgco.jp

per channel (rated current 3 A for internal fuse (slow blow fuse)); Total: 3 A DC
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength: 1500 V AC @ 1 minute
(input or 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



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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.

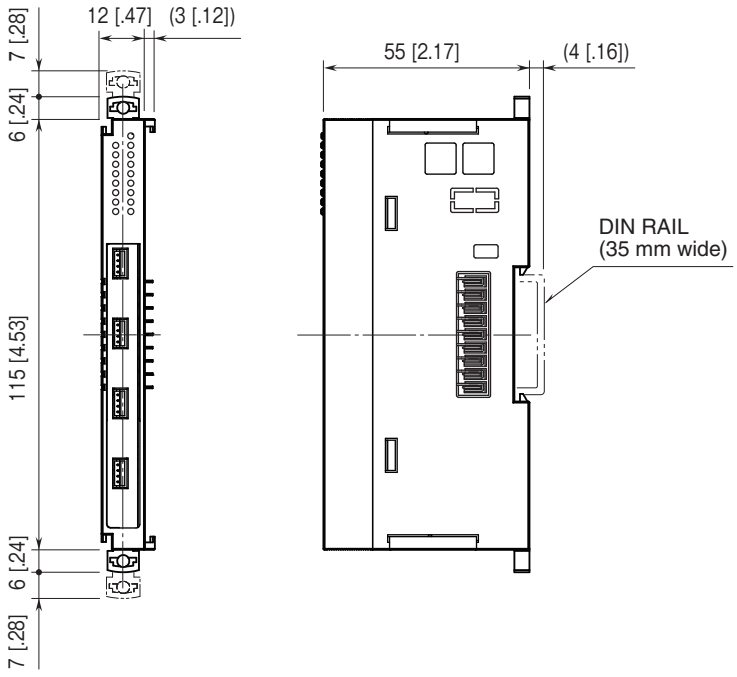
(Factory setting: 0)

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)

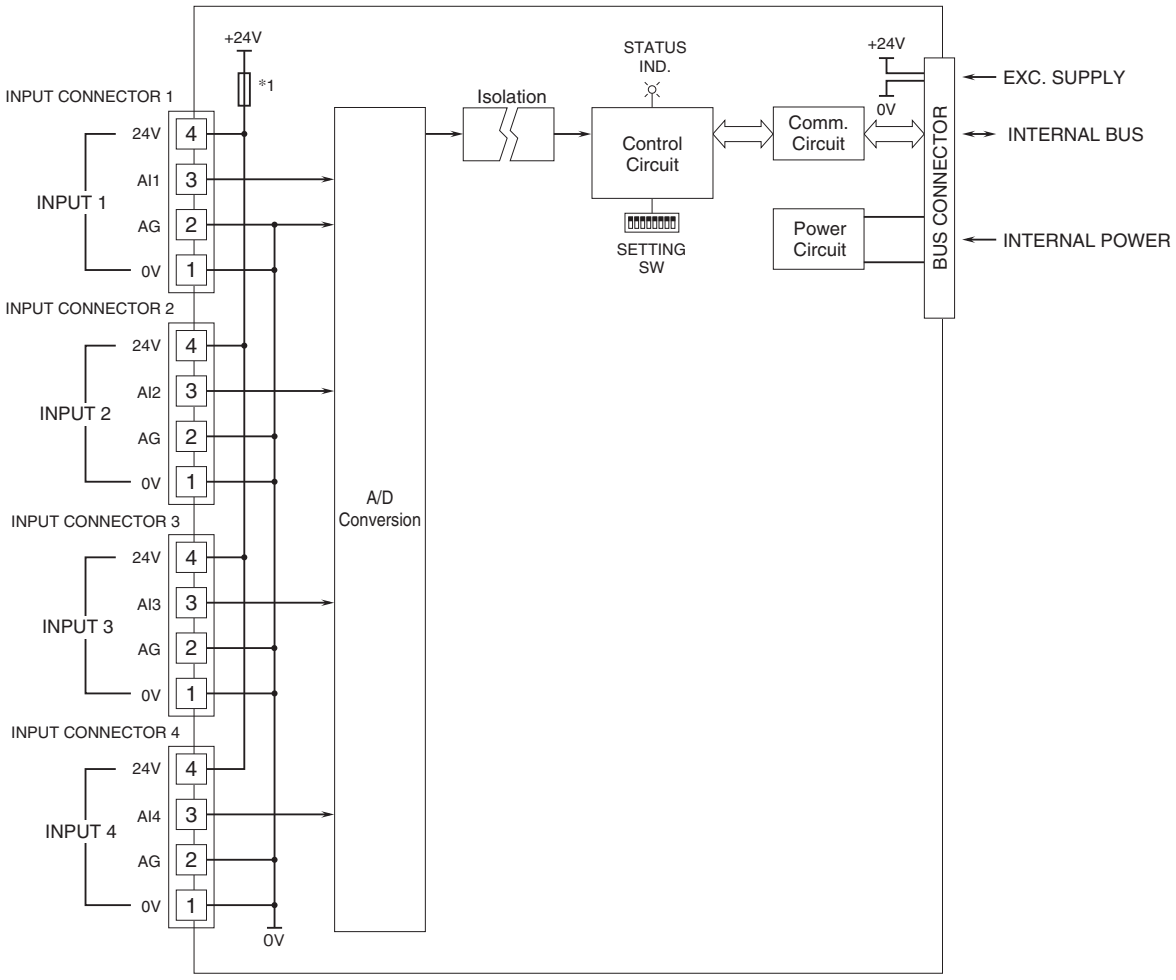
TERMINATOR	SW1-8
WIthout (*)	OFF
With	ON

EXTERNAL DIMENSIONS unit: mm [inch]



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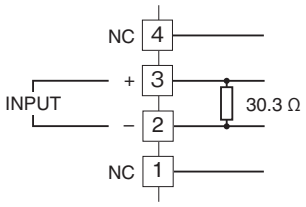
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



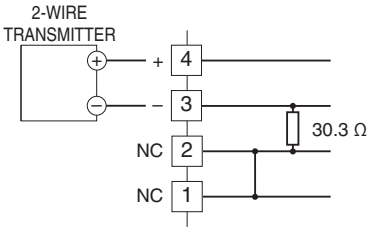
*1. Fuse is not replaceable.

■ **INPUT CONNECTION**

• When Used as Current Input



• When Used as DC Supply



Note) Do not short-circuit between pins 3 and 4 (this may damage the input resistor).

⚠ Specifications are subject to change without notice.

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