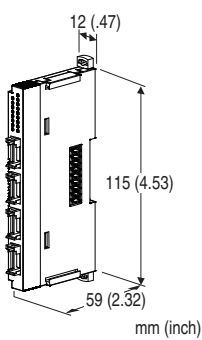## Remote I/O R8 Series

DC CURRENT INPUT MODULE
(4 points, non-isolated)

Functions & Features
• 4 channels for DC current input, compact size remote I/O module
• Input range adjustment with DIP switch or PC configurator

12 (.47)

115 (4.53)

59 (2.32)

mm (inch)

MODEL: R8-SS4N

ORDERING INFORMATION
• Code number: R8-SS4N

RELATED PRODUCTS
• PC configurator software (model: R8CFG)
Downloadable at M-System's web site.
A dedicated cable is required to connect the module to the PC. Please refer to the internet software download site or the users manual for the PC configurator for applicable cable types.

GENERAL SPECIFICATIONS
Connection
 •Input: 4-pin e-CON connector
 PWB connector XN2D-1474-S002 (Omron)
 Recommended cable connector XN2A-1470 (Omron)
 Applicable wire size 0.08 mm^2 (AWG28) - 0.5 mm^2 (AWG20)
 Outer sheath diameter: max. 1.5 dia
 (The cable connector is 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 to exc. supply to internal bus or internal power
Module address: With rotary switch
Terminating resistor: Built-in (DIP Switch, default: disable)
Status indicator: Bi-color (red/green) LED; Refer to the instruction manual.
Input status indicators: Red LED; Refer to the instruction manual.

INPUT
Input range: -20 – +20 mA DC configurable
Input range: -5 - +105 % (in percentage of input range)
Input resistance: 50 Ω

INSTALLATION
Max. current consumption: 80 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: 4 msec.
Input circuit time constant: Approx. 1 msec.
Data range: 0 – 10000 of the input range
Data allocation: 2
Module addresses in use: 2
Max. consumption current: 80 mA
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength:
 1500 V AC @ 1 minute (input to exc. supply to internal bus or internal power to ground)

STANDARDS & APPROVALS
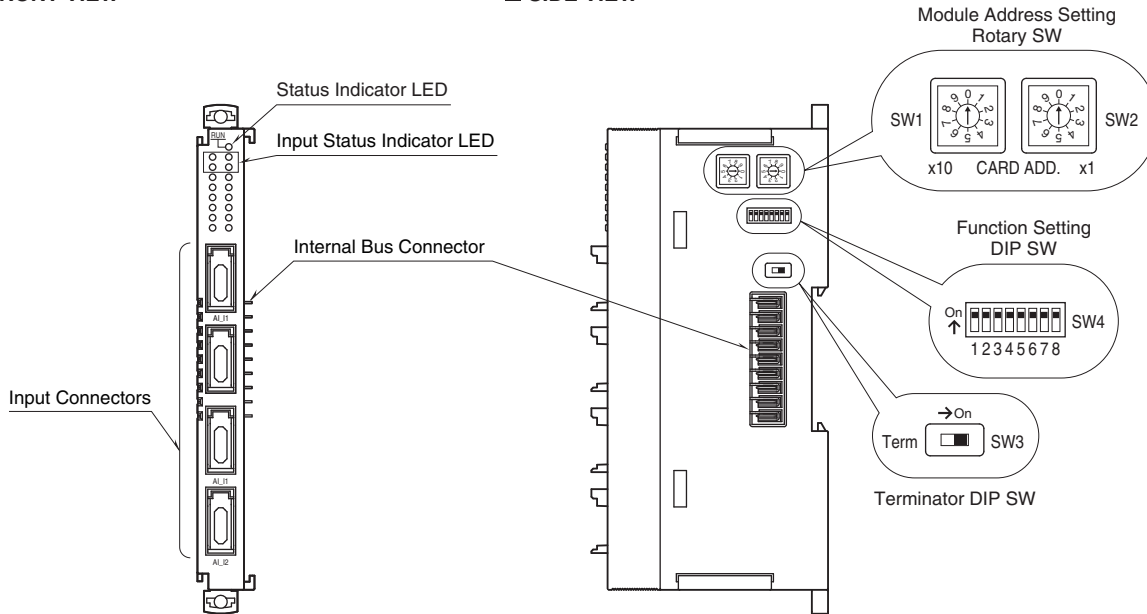CE conformity:
EMC Directive (2004/108/EC)
 EMI EN 61000-6-4: 2007
 EMS EN 61000-6-2: 2005

幸託有限公司 XIN TOP CORPORATION
TEL : (02)2598-1199   E-mail : info@xintop.com
FAX : (02)2596-2331   Website : www.xintop.com

EXTERNAL VIEW

■ **FRONT VIEW**　　　　■ **SIDE VIEW**

Status Indicator LED
Input Status Indicator LED
Internal Bus Connector
Input Connectors

Module Address Setting
Rotary SW

SW1　　SW2
x10　CARD ADD.　x1

Function Setting
DIP SW

On ↑ SW4
1 2 3 4 5 6 7 8

→On
Term SW3

Terminator DIP SW

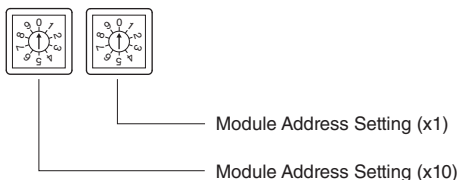## OPERATING MODE SETTING

(*) Factory setting

Caution ! - SW4-3 through 4-7 are unused. Be sure to turn off unused ones.

■ **MODULE ADDRESS**

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)

Module Address Setting (x1)

Module Address Setting (x10)

■ **Range**

Same range for all channels. Use PC Configurator to set independent ranges per channel.

INPUT RANGE	SW4-1	SW4-2
0 – 20mA DC	OFF	OFF
4 – 20mA DC (*)	ON	OFF

■ **Configuration Mode**

CONFIGURATION MODE	SW4
	8
DIP switch setting (*)	OFF
PC Configurator and communication	ON

■ **Terminator DIP SW**

Terminator switch	SW3
Without (*)	OFF
With	ON

DIMENSIONS unit: mm (inch)
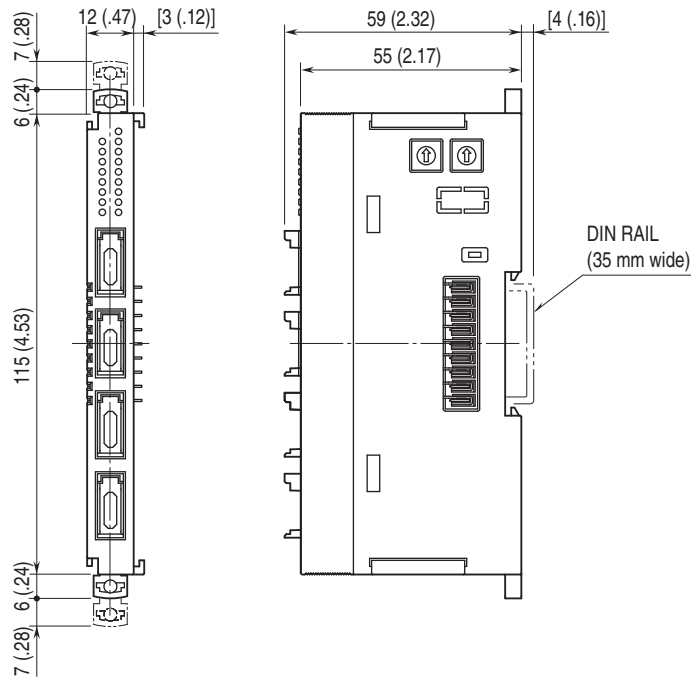
SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

*1. Not used
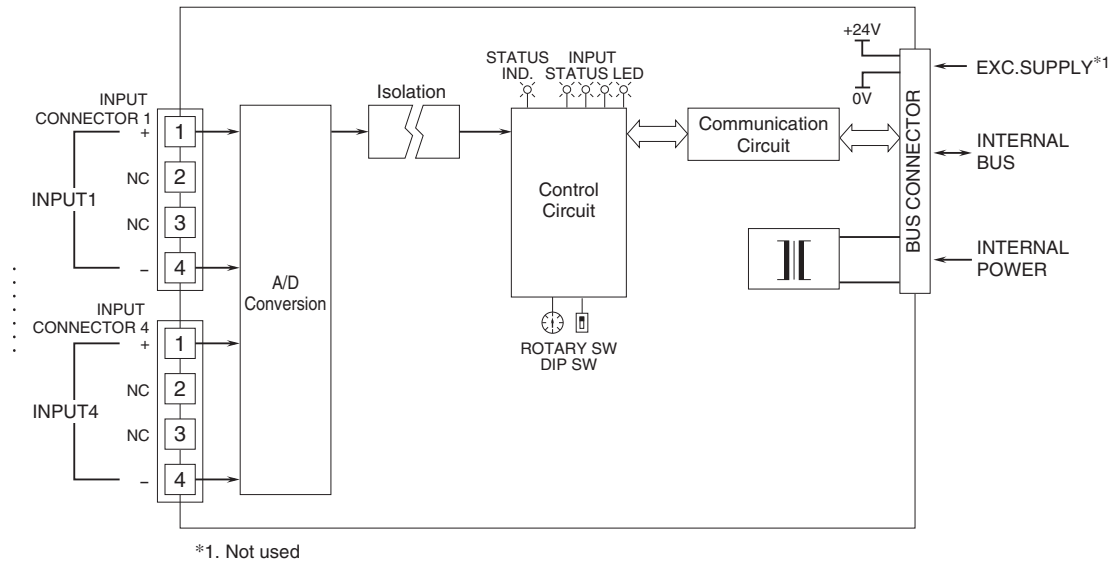
⚠ Specifications are subject to change without notice.