

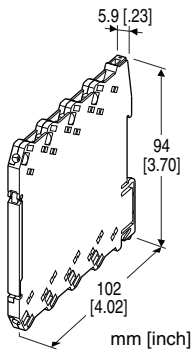
## Remote I/O R6 Series

### 4 - 20 mA INPUT MODULE

(Euro terminal)

#### Functions & Features

- Compact size remote I/O module for 2-wire transmitter



### MODEL: R6D-DS1[1]

#### ORDERING INFORMATION

- Code number: R6D-DS1[1]  
Specify a code from below for [1].  
(e.g. R6D-DS1/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 M-System's web site.)**

/C01: Silicone coating

/C02: Polyurethane coating

#### RELATED PRODUCTS

- PC configurator software (model: R6CON)  
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**

**Internal bus:** Via the Installation Base (model: R6D-BS)

**Input:** Euro terminal block (torque 0.3 N·m)

(Applicable wire size: 0.2 to 2.5 mm<sup>2</sup>, stripped length 8

mm)

**Internal power:** Via the Installation Base (model: R6D-BS)

**Housing material:** Flame-resistant resin (black)

**Isolation:** Input to internal bus or internal power

**Zero adjustments:** PC programming

**Span adjustments:** PC programming

**Module address:** Selectable with DIP and rotary switches on the side

**Configuration mode:** With DIP switches on the side panel

**Power indicator:** Green LED; Refer to the instruction manual for details.

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

#### SUPPLY OUTPUT

(across the terminals 3 - 4)

**Output voltage:** 24 - 28 V DC with no load

19 V DC min. at 20 mA

**Current rating:** ≤ 22 mA DC

**Permissible leadwire resistance:**

$R_L \leq ((19 - \text{min. XMTR Operational Voltage}) V \div 0.02 A) \Omega$

- Shortcircuit Protection

**Current limited:** 45 mA max.

**Protected time duration:** No limit

#### INPUT SPECIFICATIONS

■ **DC Current:** 4 - 20 mA DC

**Input resistance:** 250 Ω resistor incorporated

#### INSTALLATION

**Current consumption:** 55 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:** Installation Base (model: R6D-BS)

**Weight:** 60 g (2.1 oz)

#### PERFORMANCE

**Conversion rate (PC programmable. Factory set to 80 msec.)/conversion accuracy:**

10 msec./±0.8 %

20 msec./±0.4 %

40 msec./±0.2 %

80 msec./±0.1 %

**Data range:** 0 - 10000

**Data allocation:** 1

**Temp. coefficient:** ±0.01 %/°C (±0.006 %/°F)

**Response time:** Conversion rate × 2 + 50 msec. or less

**Line voltage effect:** ±0.1 % over voltage range

**Insulation resistance:** ≥ 100 MΩ with 500 V DC

**Dielectric strength:** 1500 V AC @ 1 minute  
(input to internal bus or internal power to ground)

## STANDARDS & APPROVALS

**EU conformity:**

EMC Directive

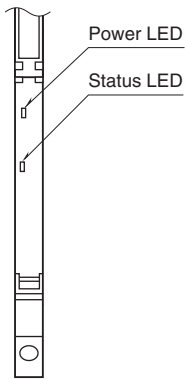
EMI EN 61000-6-4

EMS EN 61000-6-2

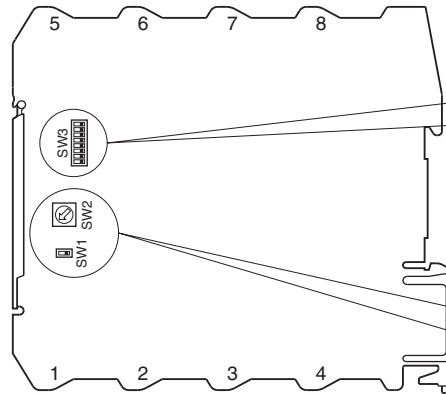
RoHS Directive

## EXTERNAL VIEW

• Front View (cover opened)



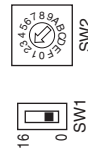
• Side View



Operating Mode Setting

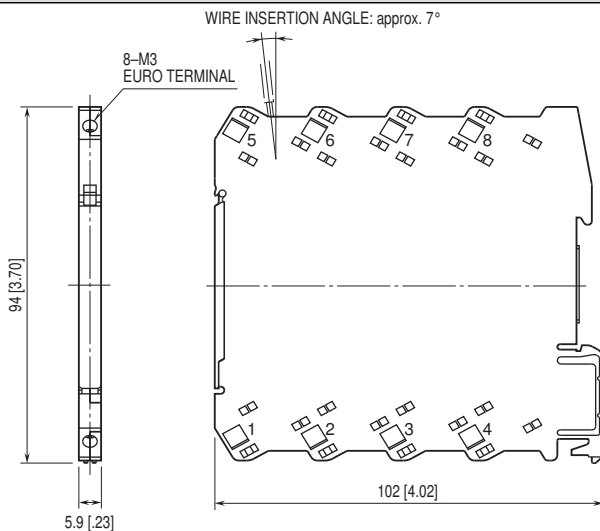


Module Address Setting

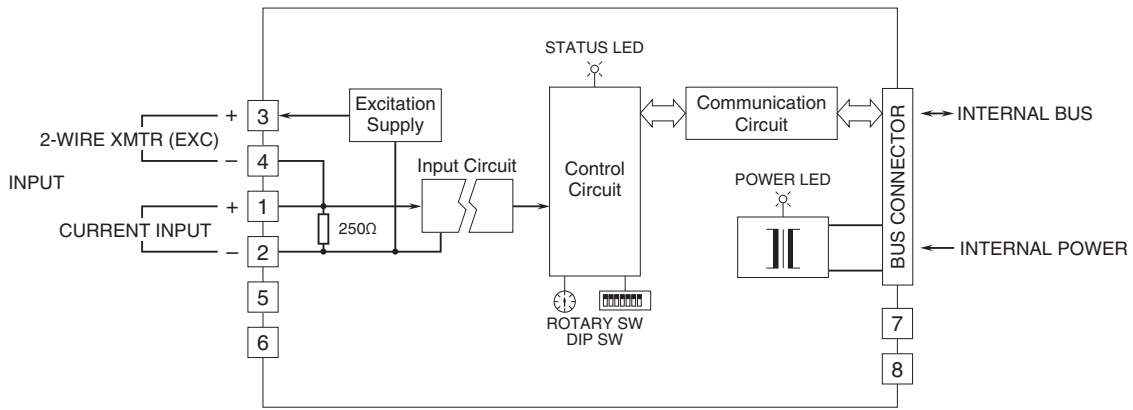


Refer to the instruction manual for setting procedures.

## EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



**SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



Specifications are subject to change without notice.