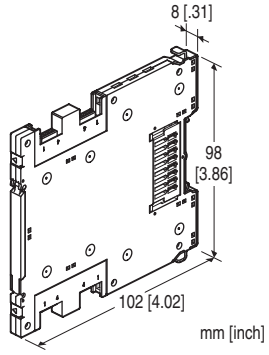
Base-free Interconnecting Ultra-Slim Signal Conditioners M60E Series

SIGNAL TRANSMITTER

(field-configurable)

Functions & Features

- Converts DC input from a sensor into a standard process signal
- Output range and response time selectable with DIP SW
- Power connector for interconnecting modules and collectively supplying power
- e-CON connector connection for easy wiring
- 6-mm wide ultra-slim design
- Low profile allows mounting in a 120-mm deep panel
- High-density mounting
- Power indicator LED



MODEL: M60EVS-R[1]

ORDERING INFORMATION

- Code number: M60EVS-R[1]

Specify a code from below for [1].
(e.g. M60EVS-R/Q)

- Specify the specification for option code /Q
(e.g. /C01)
- Default at shipment
Input range: 4 – 20 mA DC
Output range: 4 – 20 mA DC
Response time: Standard response

INPUT – Field-selectable

Current

4 – 20 mA DC (Input resistance 50 Ω)
0 – 20 mA DC (Input resistance 50 Ω)

Voltage

0 – 10 V DC (Input resistance 200 kΩ min.)
2 – 10 V DC (Input resistance 200 kΩ min.)
0 – 5 V DC (Input resistance 100 kΩ min.)
1 – 5 V DC (Input resistance 100 kΩ min.)

OUTPUT – Field-selectable

Current

4 – 20 mA DC (Load resistance 550 Ω max.)
0 – 20 mA DC (Load resistance 550 Ω max.)

Voltage

0 – 10 V DC (Load resistance 10 kΩ min.)
2 – 10 V DC (Load resistance 10 kΩ min.)
0 – 5 V DC (Load resistance 5000 Ω min.)
1 – 5 V DC (Load resistance 5000 Ω min.)

POWER INPUT

DC Power

R: 24 V DC
(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[1] OPTIONS

blank: none
/Q: Options other than the above (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to M-System's web site.)

/C01: Silicone coating
/C02: Polyurethane coating

GENERAL SPECIFICATIONS

Connection
Input and output: 4-pin e-CON connector
Power input: Via the power connector or the 4-pin e-CON connector
PWB connector (M-System's product)
Reccomended cable connector: XN2A-1470 (omron)
Applicable wire size: 0.08mm^2 (AWG28) to 0.5mm^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.)
Housing material: Flame-resistant resin (black)
Isolation: Input to output to power
Zero adjustment: -2 to +2 % (front)
Span adjustment: 98 to 102 % (front)
Power indicator LED: Green LED turns on when the power is supplied.

INPUT SPECIFICATIONS

■ DC Current: Input resistor incorporated

INSTALLATION

Power consumption: Max. 0.6 W
Power input: Max. 3 A (Total current consumed by the interconnected signal conditionerse must be 3 A or less.)

Operating temperature: -20 to +55°C (-4 to +131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Atmosphere: No corrosive gas or heavy dust
Mounting: DIN rail
Weight: 65 g (2.3 oz)

PERFORMANCE in percentage of span

Accuracy: ±0.1 %
I/O setting accuracy: ±0.2 %
Temp. coefficient: ±0.01 %/°C (±0.006 %/°F)
Response time (0 – 90 %): selectable with DIP SW
Standard: ≤ 500 msec.
Fast: ≤ 5 msec.
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 output to power to ground)

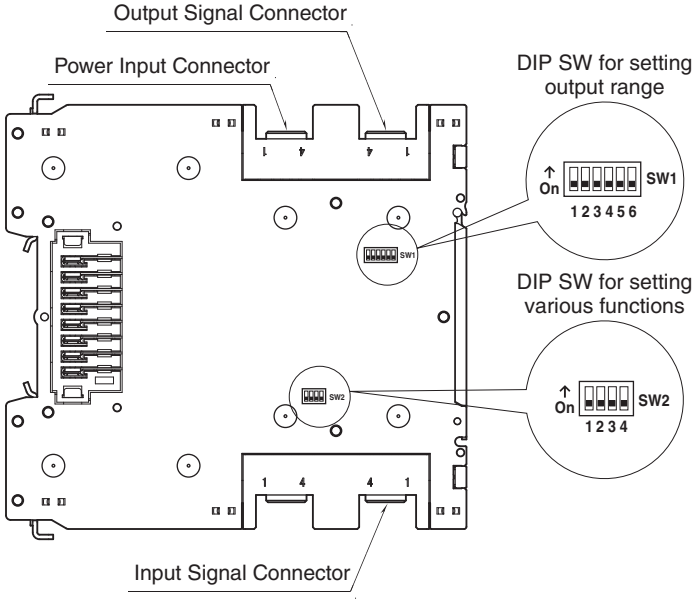
STANDARDS & APPROVALS

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

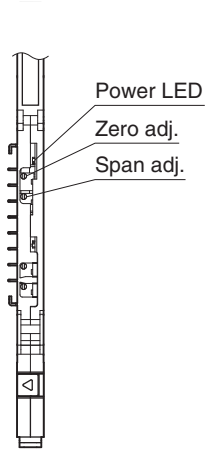
EXTERNAL VIEW

Refer to the instruction manual for the setting procedure.

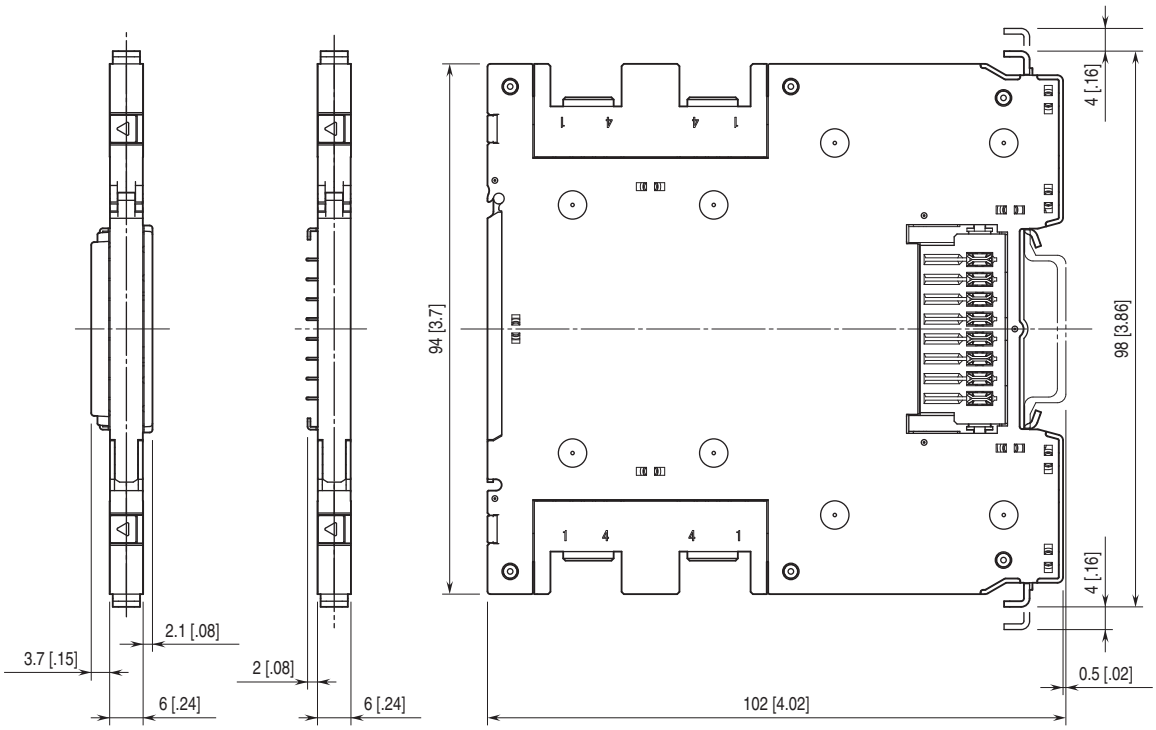
■ **LEFT SIDE VIEW**



■ **FRONT VIEW (with the front cover removed)**



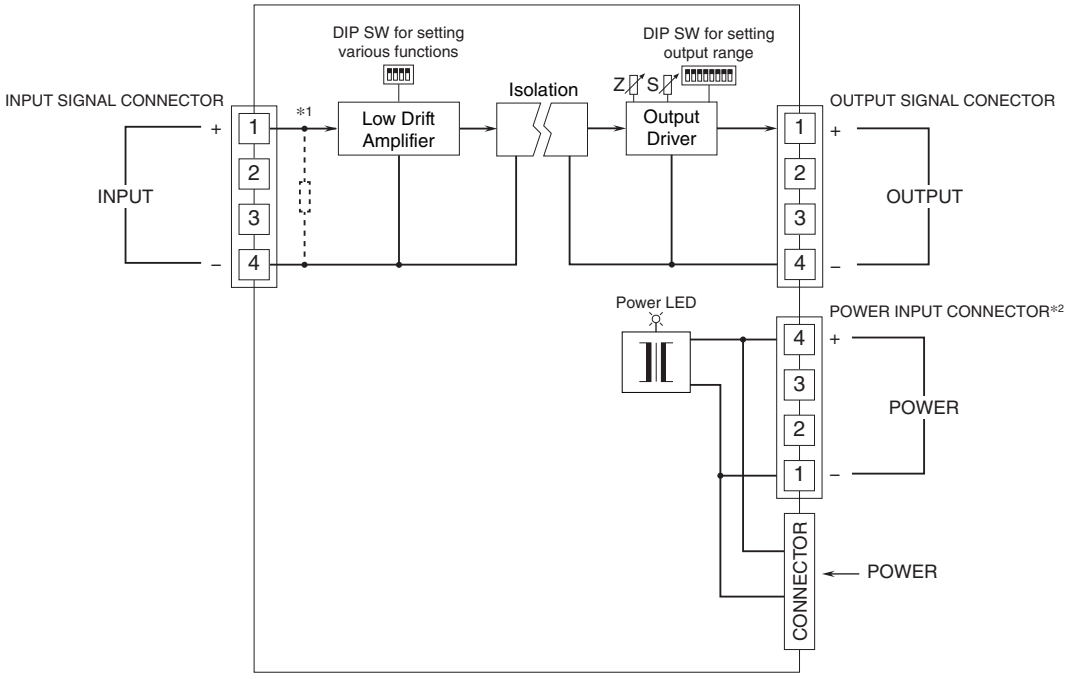
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm [inch]



· With the end cover attached

· Capable of High-density mounting

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*1. Input shunt resistor incorporated for current input.
*2. Confirm the direction of e-CON.

⚠ Specifications are subject to change without notice.

M-SYSTEM CO., LTD.
http://www.m-system.co.jp/