

OVERVIEW



This is chassis-mounting millivolt isolator with dual-output that converts millivolt input signal into any desired standard process signal.

- ▽ Anti-humid coatings on PCB are standard for improved environmental protection.
- ▽ Multiple installations on chassis provide ease of maintenance and high-density population.
- ▽ Self pop-up screws on chassis provide ease of wiring.
- ▽ Fuse on DC power line is installed standard.

ORDERING INFORMATION

Ordering Code	Standard Price
MS3903-1□□-8□□ ① ②	OPEN

SPECIFICATIONS

POWER SECTION

Power Requirement	24V DC $\pm 10\%$
Power Sensitivity	$\pm 0.1\%$ of span max. @10% variance
Power Line Fuse	300mA fuse is installed, (standard)
Power Consumption	50mA max.

INPUT SECTION

Input Signal (Specify at ① when ordering)	■ 0~10mV DC V2 ■ 0~100mV DC V3 ■ ± 10mV DC W2 ■ ± 100mV DC W3 ■ Other DC voltage signal between 5 to 200mV X(□~□) Specify input signal in parentheses.
Input Resistance	1M Ω min. (1M Ω minimum without power)
Allowable Input Voltage	30V DC max. continuous

OUTPUT SECTION

Output Signal (Specify at ② when ordering)	OUT-1/OUT-2 Code ■ 1~5V DC/1~5V DC V1 ■ 0~5V DC/0~5V DC V5 ■ 0~10V DC/0~10V DC V6 ■ ± 5 V DC/ ± 5 V DC W5 ■ ± 10 V DC/ ± 10 V DC W6 ■ 1~5V DC/4~20mA DC C1 Combinations of two output signals are limited to the above.
Maximum Output Load	Voltage output: 2mA max. Current output: 300 Ω max.
Zero Adjustment	Approx. $\pm 2\%$ of span (Adjustable by front-access trimmer)
Span Adjustment	Approx. $\pm 2\%$ of span (Adjustable by front-access trimmer)

PERFORMANCE

Accuracy Rating	$\pm 0.1\%$ /F.S (25°C $\pm 5^\circ$ C)
Temperature Effect	$\pm 0.2\%$ of span @10°C variance
Response Time	160msec max. (0→90%) @100% step input
CMRR	100dB min. (500V AC, 50/60Hz)
Isolation	Across Input, Out-1, Out-2 and Power input mutually
Insulation Resistance	100M Ω min. (@500V DC) Across Input, Out-1, Out-2 and Power input mutually
Dielectric Strength	Across Input and other ports: 1500V AC for 1 minute Across Out-1, Out-2, Power input mutually: 500V AC for 1 minute
Surge Withstand Capability	Tested for ANSI/IEEE C37.90.1-1989
Operating Environment	Ambient temperature: 0~55°C Humidity: 90% max.
Storage Temperature	-10~60°C

PHYSICAL

Installation	Installed on mounting base (RC3900-□□Al)
External Connection	Wired to mounting base (RC3900-□□Al)
Dimension	W19.5×H53×D84mm
Weight	Approx. 70g

MATERIAL

Housing	ABS Resin (UL94V-0)
PC Board	Glass Fabric, Epoxy Resin (CEM-3)
Anti-humidity Coating	HumiSeal 1A27NS (Polyurethane)

ADDITIONAL

Other Options

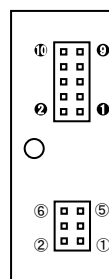
Please consult our sales representatives for the availability of the following options before ordering:

◻ (Items) ◻ (How to specify)

■ Change response frequency
 $F_c = \square\square\square\text{Hz}$ (Up to 200Hz)

■ Change response time ... $T_c = \square\square\square\text{sec}$
 (Up to 2msec @90%)

TERMINAL ASSIGNMENT



PIN	SIGNAL	PIN	SIGNAL
①	+ INPUT	⑦	+ OUTPUT 1
②	- INPUT	⑧	- OUTPUT 1
③	N. C.	⑨	+ OUTPUT 2
④	N. C.	⑩	- OUTPUT 2
⑤	N. C.	⑪	+ POWER DC24V
⑥	N. C.	⑫	- POWER DC24V
⑬	N. C.	⑭	N. C.
⑮	N. C.	⑯	N. C.
⑰	N. C.	⑱	F. G.
⑲	N. C.	⑳	N. C.

BLOCK DIAGRAM

