



Standard Specification Sheet Model: MS2903
Chassis-mounting Millivolt Isolator with Isolated Dual-output

MS2900

OVERVIEW



The MS2903 is an instrument to perform amplification of mV signals from many different types of sensor and to convert them into mutually isolated two channels of corresponding DC output signals.

- ▽ Multi-unit-mountable chassis for ease of maintenance and high density installation.
- ▽ Perfect isolation mutually between Input — Output No.1 — Output No.2 — Power line.
- ▽ Fuse protection for power line.

ORDERING INFORMATION

Ordering Code
MS2903 1 8

ECIFICATIONS

POWER SECTION

Power Requirement	24V DC ± 10%
Power Sensitivity	± 0.1% max. of output (@10% variation)
Power Fuse	2.2Ω 1/4W Fuse resistor on power line
Power Consumption	50mA max.

INPUT SECTION

Input Signal (Specify at ① when ordering)	Millivolt input signal ■ ± 10mV DC W2 ■ ± 100mV DC W3 ■ Other DC voltage signal between 5 to 200mV... X1(□~□) Specify input signal in parentheses.
Span	5~200mV DC
Input Resistance	1MΩ min. (1MΩ @rated input without power)
Allowable Input Voltage	30V DC max. continuous

OUTPUT SECTION

Output Signal (Specify at ② when ordering)	1st Output Signal/2nd Output Signal ** Order Code ■ 1~5V DC/1~5V DC V1 ■ 0~5V DC/0~5V DC V5 ■ 0~10V DC/0~10V DC V6 ■ 1~5V DC/4~20mA DC C1 * The above combination only.
Maximum Output Load	Voltage output: 2mA Current output: 300Ω
Zero Adjustment	Approx. ± 2% of span (Adjustable by front-accessible trimmer)
Span Adjustment	Approx. ± 2% of span (Adjustable by front-accessible trimmer)
Burnout Protection	Down scale Standard

PERFORMANCE

Accuracy Rating	± 0.1% max. of output span. (25°C ± 5°C)
Temperature Effect	± 0.2% max. of span (@10°C variation)
Standard Response Time	Approx. 2Hz~3dB
Insulation Resistance	100MΩ min. (@500V DC) Input—Output-1—Output-2—Power
Dielectric Strength	Input—[Output-1, Output-2, Power]: 1500V AC for 1 minute Output-1—Output-2—Power: 500V AC for 1 minute
Surge Withstand Capability	Tested for ANSI/IEEE C37.90.1-1989
Operating Environment	Ambient temperature: 0~50°C Humidity: 90%RH max. (Non-condensation)
Storage Temperature	-10~60°C

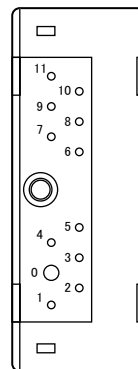
PHYSICAL

Mounting Method	Mountable on chassis (RC2900)
Wiring Method	Wired to chassis (RC2900)
Outer Dimension	W17.5×H48×D65mm (Including socket terminal block and fixing screws.)
Weight	Approx. 70g

MATERIAL

Case	ABS Resin UL94, flame resistant
PC Board	Glass Fabric Epoxy Resin

TERMINAL ASSIGNMENT



Terminal	Signal
①	+ INPUT
②	- INPUT
③	N.C.
④	N.C.
⑤	N.C.
⑥	+ OUTPUT 1
⑦	- OUTPUT 1
⑧	+ OUTPUT 2
⑨	- OUTPUT 2
⑩	+ DC24V
⑪	- POWER

BLOCK DIAGRAM

