

Product Specification Sheet Model: MS2907B

Chassis-Mount Distributor with Dual Output

DESCRIPTION

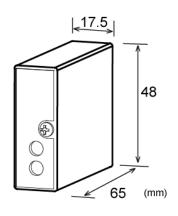
The MS2907B is a chassis-mount distributor that powers a two-wire transmitter and converts its 4–20mA signals into a 1–5V DC signal, which is obtained via a 250 Ω shunt resistor, and an isolated 4–20mA DC signal.

- ∇ A multi-slot chassis provides ease of maintenance and high-density mounting.
- ✓ Isolation is provided between [input, output 1], output 2, and power circuits. No isolation is provided between the input and output 1.
- ∇ Equipped with a fuse on the DC power line as standard.

ORDERING INFORMATION	
Ordering Code	
MC2007D	
MS2907B	

SPECIFICATIONS

POWER SECTION		
Power	24V DC±10%	
Requirement		
Power	Better than ±0.1% of span per 10%	
Sensitivity	change in supply voltage	
Power Line Fuse	300mA fuse	
Current	80mA max.	
Consumption		
INPUT SECTION		
Input	4 to 20mA DC from 2-wire transmitters	
Input Resistance	250Ω	
Transmitter	Output voltage:	
Power Supply	25V DC, typical (0% input)	
	18V DC, typical (100% input)	
	Maximum current: Approx. 25mA	
	The transmitter power can be turned on	
	and off using the push-button switch on	
	the bottom of the unit. By default, the	
	power is set to ON.	
Limit Current for	26mA, typical.	
Short-Circuit		
Protection		
Permissible	Continuous.	
Short-Circuit		



OUTPUT SECTION

Output 1	1–5V DC, non-isolated.
Output 2	4–20mA DC, isolated.
Allowable	Voltage output: 250kΩ min.
Output Load	Current output: 300Ω max.
Zero Adjustment	Approx. ±2% of span (Adjustable by front-accessible trimmer)
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	(Adjustable by front-accessible trimmer)
Span Adjustment	Approx. ±2% of span (Adjustable by front-accessible trimmer) (Adjustable by front-accessible trimmer)

PERFORMANCE

Accuracy Rating	Better than $\pm 0.1\%$ of span (at $25^{\circ}C\pm 5^{\circ}C$)
	(Output 1: Accuracy of the shunt resistor)
Temperature	Better than ±0.2% of span per 10°C
Effect	change in ambient.
Response Time	Approx. 30Hz-3dB
Isolation	Isolation between [input, output 1], output
	2, and power.
Insulation	100MΩ min. (@ 500V DC) between
Resistance	[input, output 1], output 2, and power.
Dielectric	[Input, Output 1] / Power: 1500V AC for
Strength	1 minute (Cutoff current: 0.5mA)
	[Input, Output 1] / Output 2: 500V AC for
	1 minute (Cutoff current: 0.5mA)
Surge Withstand	Tested as per ANSI/IEEE C37.90.1-1989.
Capability	
Operating	Ambient temperature: 0 to 55°C
Environment	Humidity: 5 to 90% RH (non-condensing)
Storage	−10 to 60°C
Temperature	

Duration



PHYSICAL

Installation	Mounted in an optional chassis (RC2900).
Wiring	Wired to an optional chassis (RC2900).
External	W17.5 × H48 × D65 mm
Dimensions	
Weight	60g max.

MATERIAL

Housing	ABS resin (UL 94V-0)
PC Board	Glass fabric, epoxy resin (FR-4: UL 94V-0)
Potting Agent	Polyurethane

