



DESCRIPTION

The MS2908 is a chassis-mount frequency to analog converter that converts pulse train signals from flow sensors and the like into mutually isolated dual channel DC analog output signals.

- ▽ A multi-slot chassis provides ease of maintenance and high-density mounting.
- ▽ Input, output 1, output 2, and power circuits are all isolated from each other.
- ▽ Equipped with a fuse on the DC power line as standard.

ORDERING INFORMATION

Ordering Code
MS2908-1□□ (□-□)-8□□
[1] [2] [3]

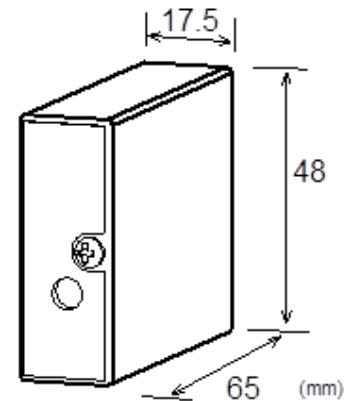
SPECIFICATIONS

POWER SECTION

Power Requirement	24V DC±10%
Power Sensitivity	Better than ±0.1% of span per 10% change in supply voltage
Power Line Fuse	300mA fuse
Current Consumption	50mA max.

INPUT SECTION

Input (Specify a code in the field [1].)	<ul style="list-style-type: none"> ■ Dry contact or open collector OP (Pull-up: Approx. 12V, 3.3kΩ) ■ AC voltage pulse (0.1 to 100Vp-p) AP (□□□) Specify the peak-to-peak value of input voltage in parentheses. ■ DC voltage pulse DP (□-□ / □) └─┘ A B <p>(Standard threshold voltage: Approx. 2.5V) Specify an input voltage range at A. If you require a non-standard threshold voltage, specify the value at B.</p>
Measuring Frequency Range (Specify a range in the field [2].)	Specify a measuring frequency range between 0–100Hz and 0–20kHz.
Input Resistance	Approx. 40kΩ (voltage pulse input)
Allowable Input Voltage	DC voltage input: 30V DC max., continuous. AC voltage input: 100Vp-p AC max., continuous (up to ±50V with reference to 0V)



Input Pulse Width	20µs min.
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OUTPUT SECTION

Output (Specify a code in the field [2].)	Output 1 / Output 2 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 Note: Combinations of two outputs are only available as shown above.
Allowable Output Load	Voltage output: 2mA max. Current output: 300Ω max.
Zero Adjustment	Approx. ±2% of span. (Adjustable by front-accessible trimmer)
Span Adjustment	Approx. ±2% of span. (Adjustable by front-accessible trimmer)

PERFORMANCE

Accuracy Rating	Better than ±0.1% of span (at 25°C±5°C)	
Temperature Effect	Better than ±0.2% of span per 10°C change in ambient.	
Response Time	Input Frequency	90% Response Time
	100Hz	Approx. 0.8s
	200Hz	Approx. 0.4s
	2kHz	Approx. 0.04s
20kHz	Approx. 0.004s	
Isolation	Isolation between input, output 1, output 2, and power.	
Insulation Resistance	100MΩ min. (@ 500V DC) between input, output 1, output 2, and power.	
Dielectric Strength	Input / [Output 1, Output 2, Power]: 1500V AC for 1 minute (Cutoff current: 0.5mA)	
	Output 1 / Output 2 / Power: 500V AC for 1 minute (Cutoff current: 0.5mA)	
Surge Withstand Capability	Tested as per ANSI/IEEE C37.90.1-1989.	
Operating Environment	Ambient temperature: 0 to 55°C Humidity: 5 to 90% RH (non-condensing)	
Storage Temperature	–10 to 60°C	

PHYSICAL

Installation	Mounted in an optional chassis (RC2900).
Wiring	Wired to an optional chassis (RC2900).
External Dimensions	W17.5 × H48 × D65 mm
Weight	70g max.

MATERIAL

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

BLOCK DIAGRAM AND CONNECTION DIAGRAM

