



**Standard Specification Sheet Model: MS2921**  
**Chassis-mounting PT Transmitter with Isolated Dual-output**  
**(RMS Operation Model)**

MS2900

**OVERVIEW**



The MS2921 is an instrument to measure the supply voltage to power equipment/facilities and to convert it into two channels of mutually isolated DC output signal.

Root/Mean/Square (R.M.S.) conversion carried out with multiplier/divider built by transistors make it possible to perform accurate measurement of the RMS value not only for sinusoidal wave form but also for distorted ones.

- ▽ 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**

<b>Ordering Code</b>
MS2921 1 8

**SPECIFICATIONS**

**POWER SECTION**

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

**INPUT SECTION**

<b>Input Signal (Specify at ① when ordering)</b>	AC Voltage signal ■ 0~110V AC 50/60Hz..... N1 ■ 0~150V AC 50/60Hz..... N2 ■ 0~250V AC 50/60Hz..... N3 ■ Except above..... NX (□~□) 250V max. AC voltage signal 50/60Hz Specify input signal in parentheses.
<b>Input Loss</b>	0.5VA max.

<b>Input Frequency</b>	50/60Hz
<b>Allowable Over Input</b>	Continuous: 120% of rated input value Instantaneous: 1.5 times of rated input value (10sec)
<b>Crest Factor</b>	3 max.

**OUTPUT SECTION**

<b>Output Signal (Specify at ② when ordering)</b>	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.
<b>Maximum Output Load</b>	Voltage output: 2mA Current output: 300Ω
<b>Zero Adjustment</b>	Approx. ±2% of span (Adjustable by front-accessible trimmer)
<b>Span Adjustment</b>	Approx. ±2% of span (Adjustable by front-accessible trimmer)

**PERFORMANCE**

<b>Accuracy Rating</b>	±0.25% max. of output span (25°C ±5°C)
<b>Temperature Effect</b>	±0.2% max. of span (@10°C variation)
<b>Standard Response Time</b>	Approx. 70msec (0→63%)
<b>Insulation Resistance</b>	100MΩ min. (@500V DC) Input—Output-1—Output-2—Power
<b>Dielectric Strength</b>	Input—[Output-1, Output-2, Power]: 1500V AC for 1 minute Output-1—Output-2—Power: 500V AC for 1 minute
<b>Surge Withstand Capability</b>	Tested for ANSI/IEEE C37.90.1-1989
<b>Operating Environment</b>	Ambient temperature: 0~50°C Humidity: 90%RH max. (Non-condensation)
<b>Storage Temperature</b>	-10~60°C

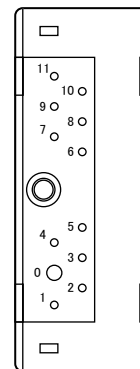
**PHYSICAL**

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

**MATERIAL**

<b>Case</b>	ABS Resin UL94, flame resistant
<b>PC Board</b>	Glass Fabric Epoxy Resin

**TERMINAL ASSIGNMENT**



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

**BLOCK DIAGRAM**

