



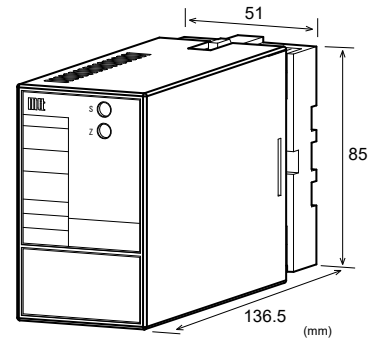
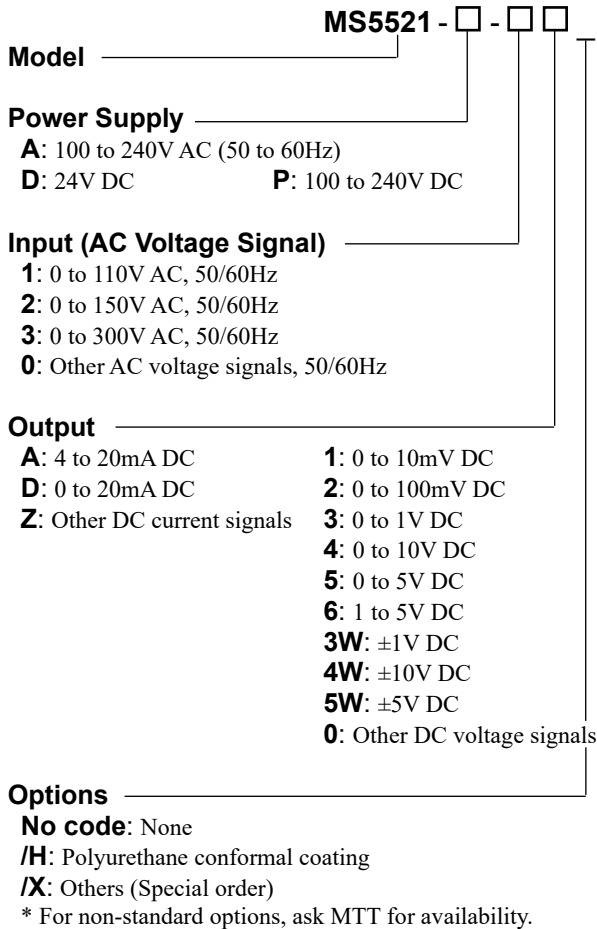
Product Specification Sheet Model: MS5521
Plug-In PT Transmitter with Isolated Single Output

MS5500

DESCRIPTION

The MS5521 is a plug-in PT transmitter that calculates the rms values of AC current signals from a PT, converts them into commonly used DC signals, and provides an isolated single output.

ORDERING CODE



SPECIFICATIONS

POWER SECTION

Power Requirements	100 to 240V AC: 85 to 264V AC (47 to 63Hz) 24V DC: 24V DC±10%		
Power Sensitivity	100 to 240V DC: 85 to 264V DC Better than ±0.1% of span for each power supply range.		
Power Line Fuse	160mA fuse		
Maximum Power Consumption			
Power	100-240V AC	24V DC	100-240V DC
	Approx. 4.5VA	Approx. 1.2W	Approx. 4.8W

INPUT SECTION

Input Resistance	1MΩ min. with or without power.
Allowable Input Current	Continuous: 120% of the rated input value Instantaneous: 1.5 times the rated input value (within 5 seconds)
Crest Factor	3 max.
Ranges Available	Between 0-10mV AC and 0-300V AC.

OUTPUT SECTION

Allowable Output Load		
Voltage Output (DC)	1V span and up	2mA max.
	10mV	10kΩ min.
	100mV	100kΩ min.
Current Output (DC)	4 to 20mA	750Ω max.
Zero Adjustment	Approx. ±5% of span. (Adjustable by the front-accessible trimmer.)	
Span Adjustment	Approx. ±5% of span. (Adjustable by the front-accessible trimmer.)	

Ranges Available

	Current Signal	Voltage Signal
Output Range (DC)	0 to 20mA	-10 to 10V
Output Span (DC)	4 to 20mA	10mV to 20V
Output Bias	0 to 100%	-100 to 100%

* For current output signals, the accuracy of any current output smaller than 0.1mA is not guaranteed.
 Output Spec. Ex. 1: For 4 to 20mA output, the output span is 16mA and the bias +25%.
 Output Spec. Ex. 2: For -1 to 4V output, the output span is 5V and the bias -20%.

ORDERING INFORMATION

To place an order, please use the ordering code format as shown above.
 (e.g.) MS5521-A-16

Other Ordering Examples:
 For an input code of "0": MS5521-A-0A (Input: 0 to 200V)
 For an output code of "0": MS5521-A-20 (Output: 2 to 5V)
 For an option code of "X": MS5521-A-2A/X (0-90% response time: 100ms max.)

● PERFORMANCE

Accuracy Rating	Better than $\pm 0.25\%$ of span with at least 10% input (at $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$).
Temperature Effect	Better than $\pm 0.2\%$ of span per 10°C change in ambient.
Response Time	400ms max. (0 to 90%) with a step input at 100%.
CMRR	100dB min. (500V AC, 50/60Hz)
Isolation	3-way isolation between input, output, and power.
Insulation Resistance	100M Ω min. (@ 500V DC) between input, output, and power.
Dielectric Strength	Input / Output / Power: 2000V AC for 1 minute (Cutoff current: 0.5mA)
Surge Withstand Capability	Tested as per ANSI/IEEE C37.90.1-1989.
Operating Environment	Ambient temperature: -5 to 55°C Humidity: 5 to 90% RH (non-condensing)
Storage Temperature	-10 to 60°C

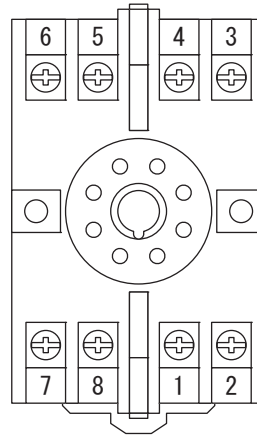
● PHYSICAL

Installation	Wall/DIN rail mounting
Mounting Direction	Vertical
Screwing Torque	0.78 to 1.18 [Nm] * Recommended
Wiring	M3.5 screw terminal connection
External Dimensions	W51 x H85 x D136.5 mm (including the socket)
Weight	Main unit: 200g max. Socket: 60g max.

● MATERIAL

Housing	ABS resin (UL 94V-0)
Socket	ABS resin (UL 94V-0)
Screw Terminal	Galvanized steel with trivalent chromate finish
Printed Circuit Board	Glass fabric, epoxy resin (FR-4: UL 94V-0)

TERMINAL ASSIGNMENTS



①	+ OUTPUT	
②	- OUTPUT	
③	L INPUT	
④	N INPUT	
⑤	N.C.	
⑥	N.C.	
⑦	P (+)	POWER
⑧	N (-)	

BLOCK DIAGRAM

