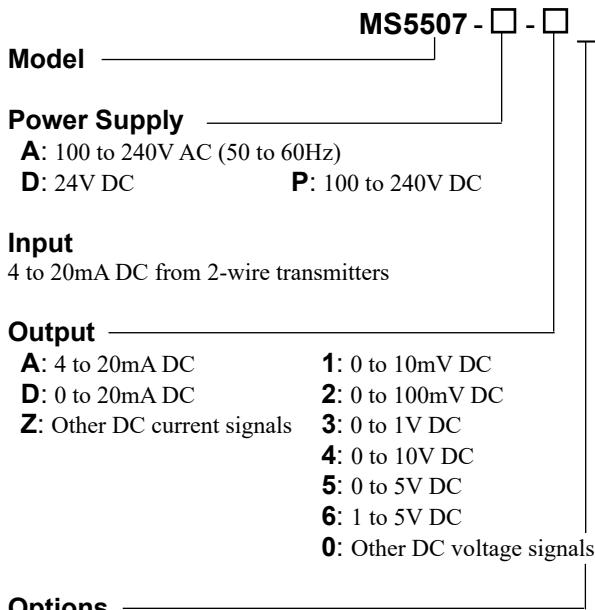


**DESCRIPTION**

The MS5507 is a plug-in distributor that powers a two-wire transmitter, converts its 4 to 20mA signals into commonly used DC signals, and provides an isolated single output. This model can also be used as an isolator.

**ORDERING CODE**



**A:** 100 to 240V AC (50 to 60Hz)  
**D:** 24V DC                      **P:** 100 to 240V DC

**Input**  
 4 to 20mA DC from 2-wire transmitters

**Output**

<b>A:</b> 4 to 20mA DC	<b>1:</b> 0 to 10mV DC
<b>D:</b> 0 to 20mA DC	<b>2:</b> 0 to 100mV DC
<b>Z:</b> Other DC current signals	<b>3:</b> 0 to 1V DC
	<b>4:</b> 0 to 10V DC
	<b>5:</b> 0 to 5V DC
	<b>6:</b> 1 to 5V DC
	<b>0:</b> Other DC voltage signals

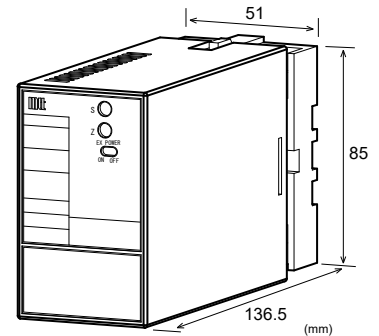
**Options**

**No code:** None  
**/K:** Fast response (0 to 90% response time: 10ms max.)  
**/H:** Polyurethane conformal coating  
**/X:** Others (Special order)  
 \* For non-standard options, ask MTT for availability.

**ORDERING INFORMATION**

To place an order, please use the ordering code format as shown above.  
 (e.g.) MS5507-A-A/K

Other Ordering Examples:  
 For an output code of "0": MS5507-A-0 (Output: 2 to 5V)  
 For an option code of "X": MS5507-A-A/X (Response frequency: 50Hz)  
 Note: If you wish to include multiple options in your order, specify the option codes in series (e.g. /KX).



**SPECIFICATIONS**

**POWER SECTION**

<b>Power Requirements</b>	100 to 240V AC: 85 to 264V AC (47 to 63Hz) 24V DC: 24V DC±10%		
<b>Power Sensitivity</b>	Better than ±0.1% of span for each power supply range.		
<b>Power Line Fuse</b>	160mA fuse		
<b>Maximum Power Consumption</b>	Power	100-240V AC	24V DC
		Approx. 6.5VA	Approx. 2.1W
			100-240V DC
			Approx. 7.2W

**INPUT SECTION**

<b>Input Signal</b>	4 to 20mA DC from 2-wire transmitters
<b>Input Resistance</b>	250Ω
<b>Transmitter Power Supply</b>	Output voltage: 26.4V, typical. (0% input) 21.6V, typical. (100% input) Maximum current: 22mA, typical.
<b>Limit Current for Short-Circuit Protection</b>	40mA max.
<b>Permissible Short-Circuit Duration</b>	Continuous.

**OUTPUT SECTION**

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

**Ranges Available**

	Current Signal	Voltage Signal
Output Range (DC)	0 to 20mA	0 to 10V
Output Span (DC)	4 to 20mA	10mV to 10V
Output Bias	0 to 100%	0 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 4 to 8V output, the output span is 4V and the bias +100%.

**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	85ms 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	100MΩ 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

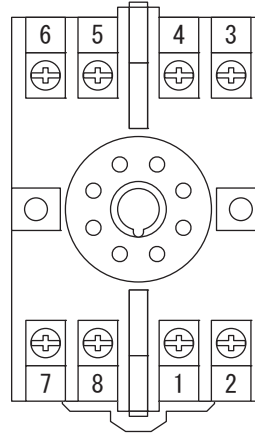
**PHYSICAL**

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 × H85 × D136.5 mm (including the socket)
Weight	Main unit: 200g max. Socket: 60g max.

**MATERIAL**

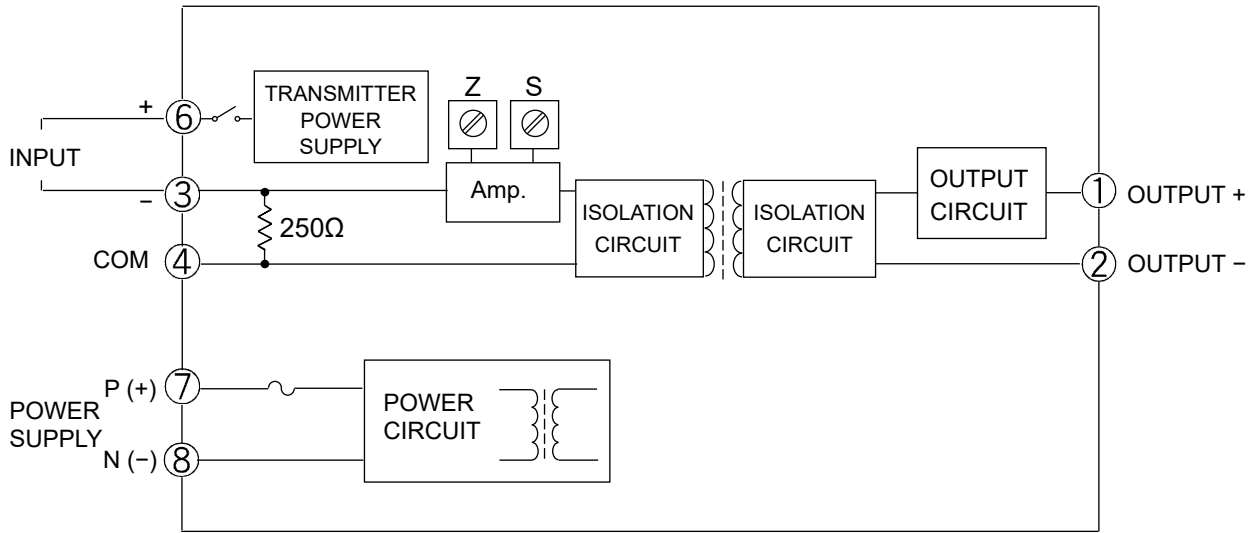
Housing	ABS resin (UL 94V-0)
Socket	ABS resin (UL 94V-0)
Screw Terminal	Galvanized steel with trivalent chromate finish
Printed Circuit Board	Glass fabric, epoxy resin (FR-4: UL 94V-0)

**TERMINAL ASSIGNMENTS**

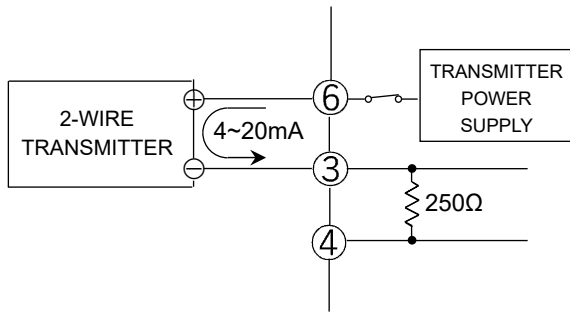


①	+ OUTPUT	
②	- OUTPUT	
③	- INPUT	
④	COM	
⑤	N.C.	
⑥	+ INPUT	
⑦	P (+)	POWER
⑧	N (-)	

**BLOCK DIAGRAM**



When used as a distributor:



When used as an isolator:

