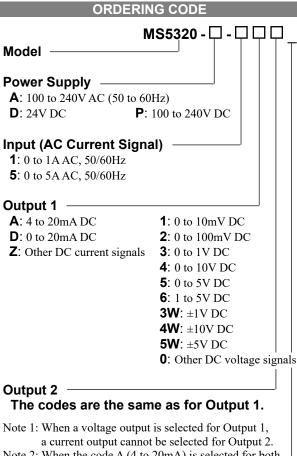


# Product Specification SheetModel: MS5320Plug-In CT Transmitter with Isolated Dual Output

## DESCRIPTION

The MS5320 is a plug-in CT transmitter that calculates the rms values of AC current signals from a CT, converts them into commonly used DC signals, and provides an isolated dual output.



Note 2: When the code A (4 to 20mA) is selected for both of the two outputs, the output load will be  $550\Omega$ maximum for Output 1 and  $350\Omega$  maximum for Output 2.

#### Options

# No code: None

/H: Polyurethane conformal coating

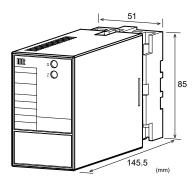
**/X**: Others (Special order)

\* 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.) MS5320-A-5A6

Other Ordering Examples: For an output code of "0": MS5320-A-160 (Output: 2 to 5V) For an option code of "X": MS5320-A-1AA/X (0-90% response time: 100ms max.)



#### SPECIFICATIONS

POWER SECT	ΓΙΟΝ		
Power	100 to 240V AC: 85 to 264V AC (47		
Requirements	to 63Hz)		
	24V DC: 24V DC±10%		
	100 to 240V DC: 85 to 264V DC		
Power Sensitivity	Better than $\pm 0.1\%$ of span for each		
	power supply range.		
Power Line Fuse	160mA fuse	;	
Maximum Power C	consumption		
	0-240VAC	24V DC	100-240V DC
	Approx.	Approx.	Approx.
	5.0VA	1.6W	6.0W
	NC		
Input Resistance	5A AC input: $2m\Omega$ (Shunt resistor)		
	1A AC input: $10m\Omega$ (Shunt resistor)		
Allowable Input	Continuous: 120% of the rated input		
Current	value		
	Instantaneous: 10 times the rated		
	input value (within 3 seconds)		
Crest Factor	3 max.		
OUTPUT SEC	TION		
Allowable Output L	.oad		
Voltage Output	1V span and	d up	2mA max.
(DC)	10 mV		$10k\Omega$ min.
( )	100mV		$100k\Omega$ min.
Current Output	4-20mA sin	gle output	$750\Omega$ max.
(DC)	4-20mA dua	•	Output 1:
( )		1	$550\Omega$ max.
			Output 2:
			$350\Omega$ max.
Zero Adjustment	Approx. ±59	% of span.	
,	(Adjustable by the front-accessible		
	trimmer.)	-	
Span Adjustment	Approx. ±5% of span.		
	(Adjustable by the front-accessible		
	trimmer.)	-	

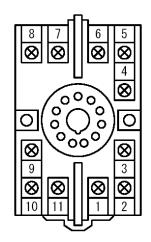
Ranges Available				
	Current Signal	Voltage Signal		
Output Range (DC)	0 to 20mA	-10 to 10V		
Output Span (DC)	4 to 20mA	10mV to 20V		
Output Bias	0 to 100%	-100 to 100%		
* For current output signals, the accuracy of any current				
output smaller than 0.1mA is not guaranteed.				
Output Spec. Ex. 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%.				

#### PERFORMANCE

Accuracy Rating	Better than $\pm 0.25\%$ of span with at	
	least 10% input (at 25°C±5°C).	
Temperature	Better than $\pm 0.2\%$ of span per 10°C	
Effect	change in ambient.	
Response Time	400ms max. (0 to 90%) with a step	
	input at 100%.	
CMRR	100dB min. (500V AC, 50/60Hz)	
Isolation	4-way isolation between input,	
	output 1, output 2, and power.	
Insulation	100MΩ min. (@ 500V DC) between	
Resistance	input, output 1, output 2, power, and	
	ground.	
Dielectric Strength	Input / [Output 1, Output 2] /	
	[Power, Ground]: 2000V AC for 1	
	minute (Cutoff current: 0.5mA)	
	Power / Ground: 2000V AC for 1	
	minute (Cutoff current: 5mA)	
	Output 1 / Output 2: 500V AC for 1	
	minute (Cutoff current: 0.5mA)	
Surge Withstand	Tested as per ANSI/IEEE	
Capability	C37.90.1-1989.	
Operating	Ambient temperature: -5 to 55°C	
Environment	Humidity: 5 to 90% RH	
	(non-condensing)	
Storage	-10 to 60°C	
Temperature		

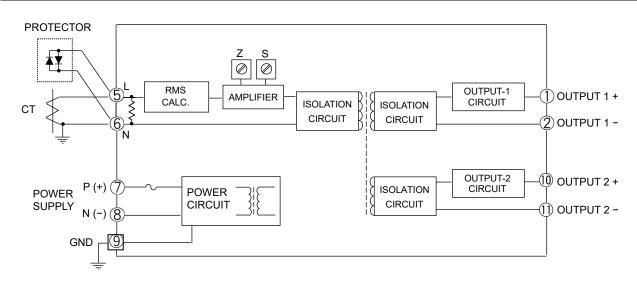
PHYSICAL		
Installation	Wall/DIN rail mounting	
Mounting Direction	Vertical	
Screwing Torque	0.78 to 1.18 [Nm] * Recommended	
Wiring	M3.5 screw terminal connection	
	The supplied protector should be	
	connected to the terminal block.	
External	$W51 \times H85 \times D145.5 \text{ mm}$	
Dimensions	(including the socket, but not	
	including the protector)	
Weight	Main unit: 200g max.	
	Socket: 80g max.	
	Protector: 22g max.	
MATERIAL		
Housing	ABS resin (UL 94V-0)	
Socket	ABS resin (UL 94V-0)	
Screw Terminal	Galvanized steel with trivalent	
	chromate finish	
Printed Circuit	Glass fabric, epoxy resin	
Board	(FR-4: UL 94V-0)	

# **TERMINAL ASSIGNMENTS**



+ OUTPUT 1	
– OUTPUT 1	
N.C.	
N.C.	
L INPUT	
N INPUT	
P (+) POWER	
N (-)	
GND	
+ OUTPUT 2	
– OUTPUT 2	

## **BLOCK DIAGRAM**



**MTT Corporation**