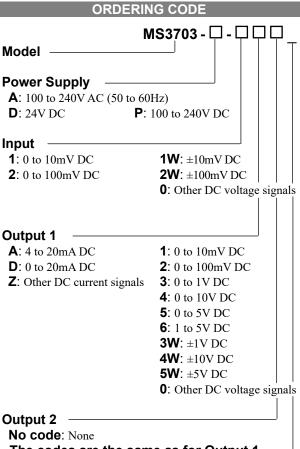


DESCRIPTION

The MS3703 is a slim, plug-in millivolt (mV) isolator that converts mV input signals from sensors or other devices into commonly used DC signals and provides isolated single or dual output.



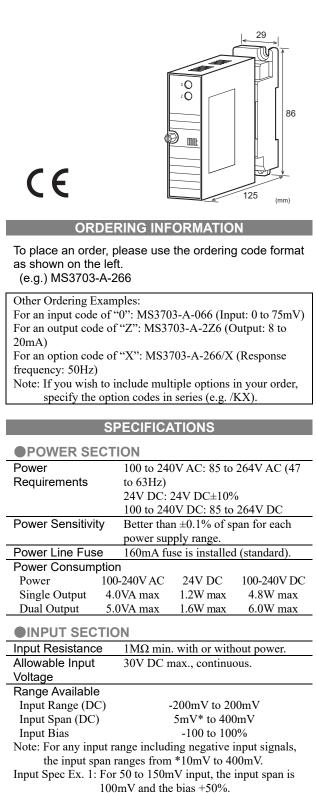
The codes are the same as for Output 1.

- Note 1: When a voltage output is selected for Output 1, a current output cannot be selected for Output 2. Note 2: When the code A (4 to 20mA) is selected for both
- of the two outputs, the output load will be 550Ω maximum for Output 1 and 350Ω maximum for Output 2.

Options

No code: None

- **/K**: Fast response (0 to 90% response time: 10ms max.) **/L**: Dual current output with high output load
 - * Not subject to CE approval.
 - (OUT-1: 750Ω / OUT-2: 550Ω)
- **/H**: Polyurethane conformal coating
- **/X**: Others (Special order)
- * For non-standard options, ask MTT for availability.



MS3700

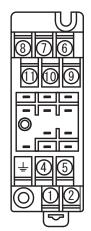
Input Spec Ex. 2: For -10 to 30mV input, the input span is 40mV and the bias -25%.

OUTPUT SEC	ΓΙΟΝ	
Allowable Output Lo	bad	
Voltage Output	1V span and up	2mA max.
(DC)	10mV	$10k\Omega$ min.
	100mV	$100k\Omega$ min.
Current Output	4-20mA single output	750Ω max.
(DC)	4-20mA dual output	Output 1:
	1	550Ω max.
		Output 2:
		350Ω max.
Zero Adjustment	Approx. ±5% of span.	55000 max.
Zoro / lajuotinoni	(Adjustable by the from	nt-accessible
	trimmer.)	
Span Adjustment	Approx. $\pm 5\%$ of span.	
opan Aujustinent	(Adjustable by the from	nt-accessible
	trimmer.)	n-accessione
Bangaa Ayailahla	u minier.)	
Ranges Available	C	7-14 C' 1
Outwit D (DC)		Voltage Signal
Output Range (DC)	0 to 20mA	-10 to 10V
Output Span (DC)		0mV to 20V
Output Bias		100 to 100%
	put signals, the accuracy	
output smaller	than 0.1mA is not guaran	teed.
	or 4 to 20mA output, the	output span is
	mA and the bias +25%.	
	or -1 to 4V output, the ou	itput span is
5\	/ and the bias -20%.	
PERFORMAN(CE	
Accuracy Rating	Better than $\pm 0.1\%$ of sp	an (at
, ,	25°C±5°C).	`
Temperature	Better than $\pm 0.2\%$ of sp	an per 10°C
Effect	change in ambient.	1
Response Time	160ms max. (0 to 90%) with a step
I	input at 100%.	
CMRR	100dB min. (500V AC	50/60Hz)
Isolation	4-way isolation betwee	n innut
	output 1, output 2, and	
Insulation	$100M\Omega$ min. (@ 500V	DC) between
Resistance	input, output 1, output	
	ground.	2, power, and
Dielectric	Input / [Output 1, Outp	nut 21 /
	[Power, Ground]: 2000	
Strength		
	minute (Cutoff current	· · ·
	Power / Ground: 2000	
	minute (Cutoff current	
	Output 1 / Output 2: 50	
O	minute (Cutoff current	
Surge Withstand	Tested as per ANSI/IE	EE
Capability	C37.90.1-1989.	
Operating	Ambient temperature:	
Environment	Humidity: 5 to 90% R	
	(non-conder	nsing)
Storage	-10 to 60°C	
Temperature		

● PHYSICAL		
Installation	Wall/DIN rail mounting	
Wiring	M3.5 screw terminal connection	
	(with a power terminal block cover &	
	drop-proof screws)	
Screwing Torque	0.8 to 1.0 [Nm] * Recommended	
External	$W29 \times H86 \times D125 mm$	
Dimensions	(including the mounting screw and socket)	
Weight	Main unit: 120g max.	
	Socket: 80g max.	
MATERIAL		
Housing	ABS resin (UL 94V-0)	
Terminal Block	PBT resin (UL 94V-0)	
Terminal Block	PC resin (UL 94V-2)	
Cover		
DIN Rail Stopper	PP resin (UL 94HB)	
Screw Terminal	Nickel-plated steel	
Contacts Material and Finish	Brass with 0.2µm gold plating	
Printed Circuit	Glass fabric, epoxy resin	
Board	(FR-4: UL 94V-0)	
STANDARDS CONFORMITY		
FO D: //		

EC DirectiveEMC Directive (2014/30/EU)ConformityEN61326-1:2013Low Voltage Directive (2014/35/EU)IEC61010-1EN61010-1:2010/A1:2019Installation Category IIPollution Degree 2Maximum operating voltage 300VReinforced insulation between[input/output/GND] and power.

TERMINAL ASSIGNMENTS



0	
(1)	P (+) POWER
2	
4	GND
4	+ OUTPUT 1
(5)	- OUTPUT 1
6	N.C.
\bigcirc	+ OUTPUT 2
8	- OUTPUT 2
9	+ INPUT
10	– INPUT
11	N.C.

MTT Corporation

BLOCK DIAGRAM

