



Standard Specification Type: MS3721

MS3700

Slim-shaped Plug-in PT Transmitter with Isolated Single/Dual Output

Overview

MS3721 is a slim-shaped plug-in PT transmitter with isolated single/dual output to convert AC voltage signals from a PT sensor to various DC signals as selected using RMS operation. (RoHS-conformed)

Ordering Format

MS3721 - [] - [] - [] - []

Type _____

Power Supply _____

A : AC 85 ~ 264V D : DC 24V
 P : DC 85 ~ 264V

Input Signal (AC Voltage Signal) _____

1 : 0 ~ 110V AC 50/60Hz
 2 : 0 ~ 150V AC 50/60Hz
 3 : 0 ~ 300V AC 50/60Hz
 0 : Designated AC 50/60Hz

Output-1 _____

A : 4 ~ 20mA DC 1 : 0 ~ 10mV DC
 D : 0 ~ 20mA DC 2 : 0 ~ 100mV DC
 Z : Designated DC 3 : 0 ~ 1V DC
 4 : 0 ~ 10V DC
 5 : 0 ~ 5V DC
 6 : 1 ~ 5V DC
 3W : ± 1V DC
 4W : ± 10V DC
 5W : ± 5V DC
 0 : Designated VDC

Output-2 _____

No entry: None.
 Similar to Output-1.

☞ When Out-1 is set for Voltage, Out-2 cannot be designated for Current.
 ☞ When both outputs are set for 4~20mA, the Output Load of Out-1 will be less than 550Ω, and that of Out-2 will be 350Ω.

Option _____

No entry: None.
 / X : Custom Order.....Additional cost required.
 *Contact us for custom-order requirement.

Please specify upon ordering

•Product Model Number
 (Example) MS3721-A-2A6

- Other items to be specified
- For input "0": MS3721-A-0A6 (Input 0~200V)
 - For output "0": MS3721-A-2A0 (Output 2~5V)
 - For option "X": MS3721-A-2A6/X (Response Frequency 100 msec max.:0~90%)
 - For more than one option: Enter Option Codes in succession(/XX)



Specifications

●Power Supply Section

Power Supply	AC85~264V (Rating 100~240V) 47~63Hz DC24V ± 10% DC85~264V (Rating 100~240V)
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Power Sensitivity Within ±0.1% of Span for each power supply voltage.

Power Supply Fuse 160mA Fuse

Maximum Power Consumption

Power Supply	AC85~264V	DC24V	DC85~264V
Single Output	4.5VA max. / 1.2W max.	4.8W max.	
Dual Output	5.0VA max. / 1.6W max.	6.0W max.	

●Input Section

Input Resistance	1MΩ min. with/without excitation
Input Voltage	Continuous 120% Rated Input Instantaneous 1.5 x Rated Input (5 sec.)
Allowable	
Crest Factor	3 max.
Range of Products Available	Within the range between AC0~10mV and AC0~300V

●Output Section

Maximum Output Load			
Voltage Output (DC)	1V Span min.	2mA max.	
	10mV	10kΩ min.	
	100mV	100kΩ min.	
Current Output	4~20mA Single output	750Ω max.	
	4~20mA Dual output	Out-1 550Ω max. Out-2 350Ω max.	

Zero Adjustment Approx. ±5% (of Span)
 Range (Adjustable by Trimmer on front panel)

Span Adjustment Approx. ±5% (of Span)
 Range (Adjustable by Trimmer on front panel)

Range of Products Available

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

*For current output smaller than 0.1mA, the accuracy is not guaranteed.

(e.g.1) 4~20mA ⇒ Output Span 16mA, Bias 25%

(e.g.2) -1~4V ⇒ Output Span 5V, Bias -20%

● **Standard Performance**

Conversion Accuracy	Within $\pm 0.25\%$ /F.S. at 10% or more of Span (@25°C $\pm 5^\circ$ C)
Temp. Characteristics	Within $\pm 0.2\%$ of Span with every 10°C variation
Response Time	400msec max. (0~90%) @100% step input
CMRR	100dB min. (500V AC, 50/60Hz)
Signal Isolation	Between Input - Out1-Out2-Power Supply-Ground
Isolation Resistance	100M Ω min. (@500V DC)
Dielectric Strength	Between Input-[Out1,Out2]-[Power Supply, Ground]: 2000V AC, Shut Down Current 0.5mA for 1 minute Between Power Supply - Ground: 2000V AC, Shut Down Current 5mA for 1 minute Between Out1 - Out2: 500V AC, Shut Down Current 0.5mA for 1 minute
Measures against SWC	Conform to ANSI/IEEE C37.90.1-1989
Operating Environment	Temperature: -5~55°C Humidity : 5~90%RH (Non-Condensing)
Storage Temp.	-10~60°C

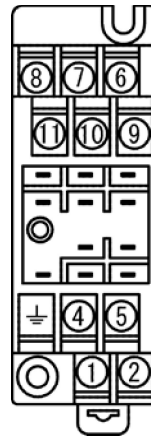
● **Installation / Physical Specifications**

Installation	Wall mounting &/or DIN-rail mounting
Wiring	M3.5 screw terminal connection (with P.S. terminal cover & screw drop-protection)
Screw Tightening Torque	0.8~1[N·m] Recommendable
Outer Dimension	W29×H86×D125mm (incl. set screws & terminal block)
Mass	Main body 120g max., Terminal Block 80g max.

● **Materials**

Housing	ABS Resin (UL-94V-0)
Terminal Block	ABS Resin (UL-94V-0)
Terminal Screws	Iron/Nickel-plated
Terminal Surface Treatment	0.2 μ m / Gold plated
P.C. Board	Glass-Epoxy (FR-4:UL-94V-0)
Moisture-proof Coating	HumiSeal Coating :HumiSeal 1A27NS(Polyurethane Resin)

Terminal Arrangement / Signal Assignment



①	P(+)	POWER
②	N(-)	
⊥	GND	
④	+ OUTPUT 1	
⑤	- OUTPUT 1	
⑥	N. C	
⑦	+ OUTPUT 2	
⑧	- OUTPUT 2	
⑨	N. C	
⑩	L INPUT	
⑪	N INPUT	

Block Diagram

