

Single-channel high accuracy analog signal isolation transmitter

Features:

- ◆ Small size, low cost, international standards DIN35mm rail mounting
- ◆ three-port isolation (input, output and power supply)
- ◆ High accuracy (0.1% F.S, 0.2% F.S)
- ◆ High linearity (0.1% F.S)
- ◆ High isolation voltage (2500VDC/60S)
- ◆ Low temperature drift (35PPM/°C)
- ◆ Wide Industrial class operation temperature (-45~+85°C)
- ◆ High reliability (MTBF>50 Wan hour)
- ◆ Power supply (5VDC/12VDC/15VDC/24VDC single power supply options)
- ◆ International standard signal (0~2.5V/0~3.3V/0~5V/1~5V/0~10V/0~±10V/4~20mA/0~±20mA/0~20mA/0~10mA/0~1mA/0~100mV etc. optional)
- ◆ Passed CE Certificate

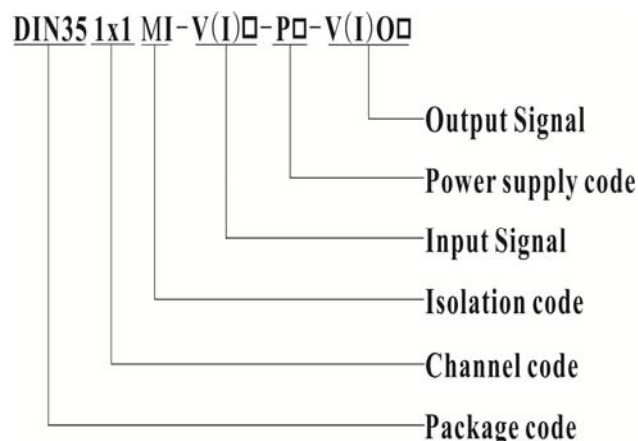
Applications:

- ◆ DC current/voltage signal isolation, conversion and amplification
- ◆ Industrial field signal isolation and conversion, and long-distance transmission without distortion
- ◆ Analog signal ground interference suppression and analog isolation, acquisition, conversion and long-distance transmission
- ◆ 4~20mA/0~20mA/0~5V/0~10V/4~20mA/0~20mA/0~10V/0~5V/ sensor signal isolation, transformation and remote
- ◆ Instrumentation and sensor signal transceiver
- ◆ Power isolation monitoring industrial site
- ◆ Power monitoring, medical equipment isolation barrier
- ◆ Overcome the interference between various devices and acquisition, isolation, transformation analog signal

General Description:

JIE Sheng Da Technology DIN35 1x1 MI active precision isolation transmitter is a signal conditioner with electrical insulation between input and output. It can receive a variety of analog signal from the field instrument, and transmit a standard output signal or user-specified special signal to the control room、 PLC、 PC or DCS. The product is isolated between power supply, input and output, the isolated voltage between them is up to 2500VDC .It is widely used in the industrial measurement systems, medical electronic equipment, electrical equipment etc. Adopting high efficiency electromagnetism isolation technology to achieve signal isolation, it is available to keep high output accuracy, good linearity and low temperature drift.

Selections and Definitions:





Product Selection Parameter List:						
DIN35	1x1	MI	V(I)x	Px	V(I)Ox	Detailed description
Package code						Standard DIN 35mm Package
Channel code						1-input-1-putput
Isolation code						Magnetic isolation
signal input code:		Power supply code:		output signal code:		
Voltage(VDC)	Current(mA)	Power(VDC)		Current (mA)	Voltage(VDC)	
V1: 0~5V	I1: 0~1mA	P1: 24VDC		IO1: 4~20mA	VO4: 0~5V	
V2: 0~10V	I2: 0~10mA	P2: 15VDC		IO2: 0~20mA	VO5: 0~10V	
V3: 0~75mV	I3: 0~20mA	P3: 12VDC		IO3: -20~+20mA	VO6: 1~5V	
V4: 0~2.5V	I4: 4~20mA	P4: 5VDC			VO7: 0~±5V	
V5: 0~±5V	I5: 0~±1mA				VO8: 0~±10V	
V6: 0~±10V	I6: 0~±10mA				VO6: 1~5V	
V7: 0~±100mV	I7: 0~±20mA					
V(I)ud: User-defined		Pud: User-defined		V(I)Oud: User-defined		
Note1: When ordering ,please determine input、 output and power , special can customize						

Electrical Characteristics:

Signs	Item		Test Condition	Min	Type	Max	Units	
Isolation characteristics	Isolation voltage		AC,50Hz,(Tested for 1 minute humidity<70%, leakage current < 1mA)		2500		V(rms)	
Transmission characteristics	Gain				1		V/V	
	Gain drift				35		ppm/°C	
	Non-linearity				0.1	0.2	%FSR	
Input characteristics	Signal input	voltage		0		15	V	
		current		0		30	mA	
	Input offset voltage				2	5	mV	
	Input impeda	voltage			1		M	
current						50	Ω	
Output characteristics	Signal output	voltage		-10		10	V	
		current		-20		20	mA	
	Load capacit	voltage	Vout=10V			2		kΩ
		current			0	350	500	Ω
Signal output ripple		Unfiltered			10	20	mVRM	
Power input characteristics	Power supply	Voltage		3.3	12	24	VDC	
		Power loss				2	W	
		Rage		-10		+10	%	
Other characteristics	operating temperature			-45		85	°C	
	storage temperature			-55		105	°C	
	Weight					60	g	
Note:	Normal load ≤ 350Ω, if required load 500Ω, please note when ordering .							

Selection Example:

Example 1: Signal Input 1: 0-5VDC; Signal Output 1: 0-10VDC; Power Supply: 24VDC;
Model: DIN35 1x1 MI-V1-P1 -VO5

Example 2: Signal Input 1: 4-20mA; Signal Output 1: 4-20mA; Power Supply: 24VDC;
Model: DIN35 1x1 MI-I4-P1-IO1

Example 3: Signal Input 1: 0-20mA; Signal Output 1: 4-20mA; Power Supply: 24VDC;
Model: DIN35 1x1 MI-I3-P1-IO1

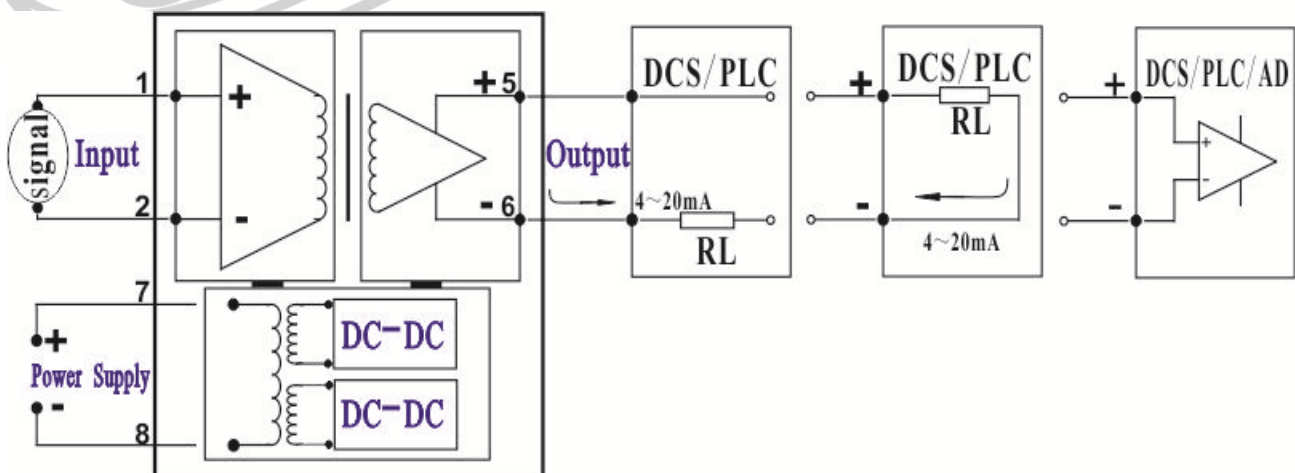
Example 4: Signal Input 1: 4-20mA; Signal Output 1: 0-10V; Power Supply: 24VDC;
Model: DIN35 1x1 MI-I4-P1-VO5

Example 5: Signal Input 1: 0~±10V; Signal Output 1: 0~±5V; Power Supply: 24VDC;
Model: DIN35 1x1 MI-V6-P1-VO7

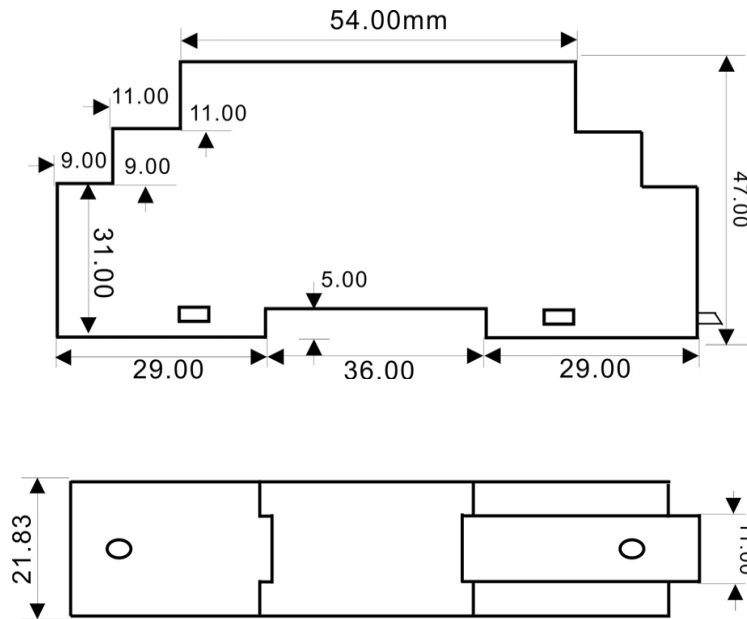
Pins Function Description:

Signal Type	Pin	Function Description	Pin	Function Description	Package
Voltage current output	1	Signal In +	5	Signal Out +	International Standard DIN35 Rail Mounting
	2	Signal In -	6	Signal Out -	
	3	No pin (NC)	7	Power +	
	4	No pin (NC)	8	Power -	

Application Wiring Diagram:



Product Dimensions:



Isolation Transmitter Picture:



Notes:

- 1、 Please read the user manual carefully before using. If any question please contact our technical support department.
- 2、 Please do not use this product in hazardous area. The power supply of this product should be 24VDC power source. It is forbidden to use 220VAC power supply.
- 3、 Calculating from the date of delivery, during normal use of the product, any quality problems are free repair or replacement by Company during 3 years warranty,
- 4、 To avoid invalid, or any failure, users disassemble this product is forbidden
- 5、 the product is strictly forbidden demolish without permission for not damage
- 6、 All specifications measured at $T_a=25^{\circ}\text{C}$, humidity $<75\%$, nominal input voltage and rated output load unless otherwise specified.
- 7、 In this datasheet, all the test methods of indications are based on corporate standards.