



1-in-1-out Analog mV Signal isolation transmitter

Features:

- ◆ Low cost, small size, international standards DIN35mm rail mounting
- ◆ Three-port isolation (input, output and power supply)
- ◆ High accuracy: (0.1%, 0.2%)
- ◆ High linearity(0.1% F.S)
- ◆ Isolation voltage(3000VDC/60s)
- ◆ Low temperature drift(100PPM/°C)
- ◆ Wide operation temperature(-45~+85°C)
- ◆ High reliability(MTBF>50 Wan hour)
- ◆ Power supply(5VDC/12VDC/15VDC/24VDC multiple choice)
- ◆ International standard small signal input(0-10mV/0-20mV/0-50mV/0-75mV etc.)
- ◆ International standard signal output(0-3.3V/0-5V/0-10V/1-5V/4-20mA/0-20mA/0-10mA,etc.)

Applications:

- ◆ mV-level voltage signal isolation, conversion and amplification
- ◆ Analog signal ground interference suppression
- ◆ Instrumentation and sensor signal transceiver
- ◆ Electrical Isolation control industrial field
- ◆ Analog signal data isolation, acquisition and conversion
- ◆ Industrial field signal isolation and conversion
- ◆ Signal remote transmission without distortion
- ◆ Power monitoring, medical equipment and isolation barrier

General Description:

JieShengda Technology **JSD TAMS-1001D** series mV-level 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 3000VDC .It is widely used in the power isolation, monitoring and control of industrial site, power monitoring, medical electronic equipment, analog signal isolation and acquisition etc. Adopting optical isolation technology, compared with the electromagnetism isolation transmitter has a stronger anti-EMC electromagnetic interference ,it is available to keep free gain adjustment and zero adjustment ,low temperature drift and good linearity, suitable for using vibration, damp industrial field, the international standard DIN35mm rail mounting, user-friendly installation.(If the site is tension, pressure, gravity, differential pressure, strain bridge and differential signal sensor, please choose **JSD TAB-1001S** series isolation transmitter.)

Selections and Definitions:

Product Selection Parameter List:					
signal input code:		Power supply code:		output signal code:	
1:	0-10mV	W:	8-32VDC	1:	4-20mA
2:	0-20mV	1:	24VDC	2:	0-20mA
3:	0-50mV	2:	15VDC	3:	0-10mA
4:	0-75mV	3:	12VDC	4:	0-5VDC
5:	0-100mV	4:	5VDC	5:	0-10VDC
6:	0-200mV			6:	1-5VDC
U:	User-defined	U:	User-defined	U:	User-defined
Note1:When ordering,please determine input、output and power,special can customize					



JSD TAMS-1001D Series Analog mV Signal Isolation Transmitter

Selection example:

Example1: input: 0-10mV; output: 0-3.3V; power supply: 12VDC; Model: JSD TAMS-1001D-13U

Example2: input: 0-30mV; output: 4-20mA; power supply: 24VDC; Model: JSD TAMS-1001D-U11

Example3: input: 0-100mV; output: 0-10V; power supply: 8-32VDC; Model: JSD TAMS-1001D-5W5

Example4: input: 0-200mV; output: 0-5V; power supply: 24VDC; Model: JSD TAMS-1001D-614

Example5: input: 0-75mV; output: 0-20mA; power supply: 15VDC; Model: JSD TAMS-1001D-422

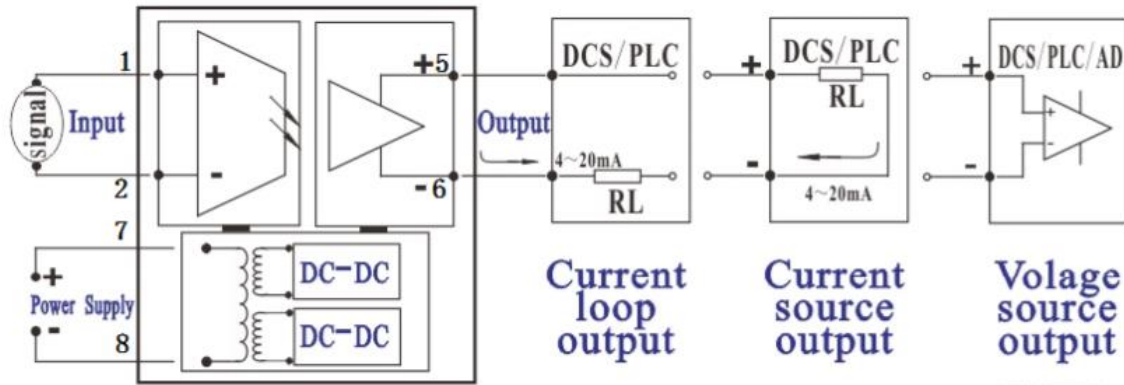
Electrical Characteristics:

Signs	Item	Test condition	Min	Type	Max	Units	
Isolation characteristics	Isolation voltage	AC,50Hz,(Tested for 1 minute humidity<70% ,leakage current < 1mA,)		3000		V(rms)	
Transmission characteristics	Gain			10/1		mV/V	
	Gain drift			100		ppm/	
	Non-linearity			0.1	0.2	%FSR	
Input characteristics	Signal input	Voltage	5	100	500	mV	
	Input offset voltage			2	5	mV	
	Input impedance	Voltage	1			M	
Output characteristics	Signal output	Voltage	0	10		V	
		Current	0	20		mA	
	Load capacity	Voltage	Vout=10V		2		kΩ
		Current		0	350	500	Ω
	Response time				≤1		mS
	Signal output ripple		Unfiltered		10	20	mV _{RMS}
	Voltage signal drift		-45~+85 Operating temperature		0.2		mV/°C
Power input characteristics	Power supply	Voltage	5	12	32	VDC	
		Power loss		0.5	1	W	
		Range	-10		+10	%	
	Operating temperature			-45		85	°C
	storage temperature			-55		105	°C
	Weight				70		g
Note 2:	Normal load ≤ 350Ω, if required load 500Ω, please note when ordering .						

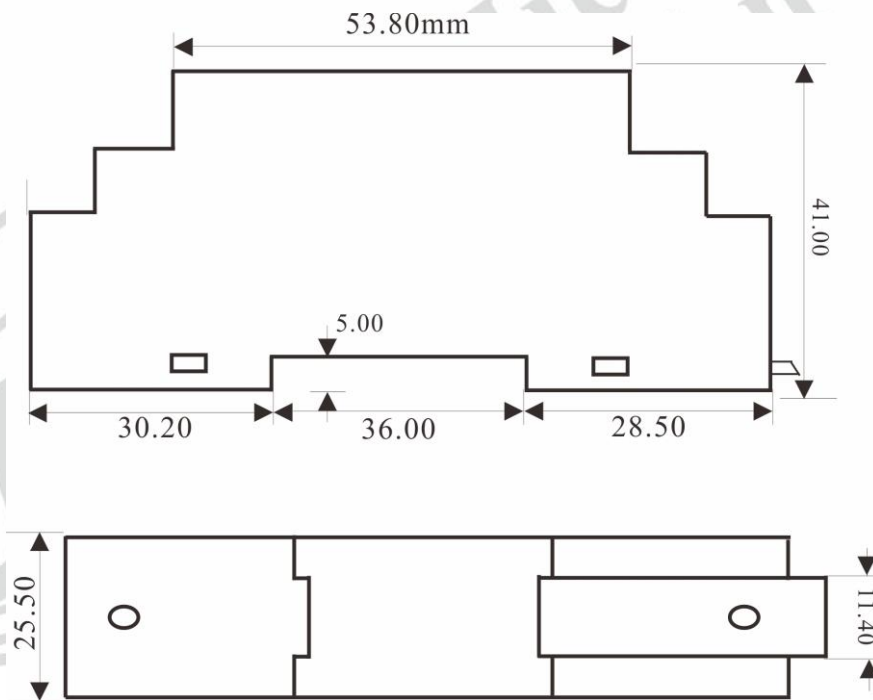
Pin function:

PIN	FUNCTION	PIN	FUNCTION	Package type
1	Signal Input+	5	Signal Output +	Standards DIN35mm rail mounting
2	Signal Input-	6	Signal Output -	
3	No pin (NC)	7	Power In +	
4	No pin (NC)	8	Power In -	

Application Wiring Diagram:



Product Dimensions:



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 Ta=25 °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.