



1-in-1-out high voltage/high Current 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, 0.3% F.S)
- ◆ Full-scale range (<0.1% F.S)
- ◆ High 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)
- ◆ Signal input (0-2000V/0-1500V/0-750V/0-500V/0-200V/0-20A/0-10A/0-5A/0-1A etc.)
- ◆ International standard signal output (0-5V/0-10V/1-5V/4-20mA/0-20mA, etc.)

Application:

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

General Description:

JieShengda Technology **JSD TAH-1001** series 1-in-1-out high voltage(high current) signal isolation transmitter is a signal conditioner with electrical insulation between input and output, it can receive a variety of analog high voltage signal from the field instrument or high voltage equipment, 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 low temperature drift and good linearity, suitable for using vibration industrial field, the international standard DIN35mm rail mounting, user-friendly installation.

Sections and Definitions:

Selections list:							
signal input code:				Power supply code:		output signal code:	
Voltage(VDC)		Current(DC)		W:	9-36VDC	1:	4-20mA
1:	0-2000V	A:	0-20A	1:	24VDC	2:	0-20mA
2:	0-1500V	B:	0-15A	2:	15VDC	3:	0-10mA
3:	0-1000V	C:	0-10A	3:	12VDC	4:	0-5V
4:	0-750V	D:	0-5A	4:	5VDC	5:	0-10V
5:	0-500V	E:	0-2A			6:	1-5V
6:	0-300V	F:	0-1A				
7:	0-200V	G:	0-0.5A				
U:	User-defined			U:	User-defined	U:	User-defined
Note:	When ordering, please determine input、 output and power , special can customize						



Selection Example:

Example 1:input:0-1500VDC; output:4-20mA; power supply:24VDC; Model: JSD TAH-1001-111

Example 2:input:0-200VDC; output:0-5V; power supply:15VDC; Model: JSD TAH-1001-624

Example 3:input:0-10ADC; output:4-20mA; power supply:9-36VDC; Model: JSD TAH-1001-CW1

Example 4:input:0-5ADC; output:0-3.3V; power supply:24VDC; Model: JSD TAH-1001-D1U

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 (voltage)		100			V/V
Gain (current)			100			V/mA	
Gain drift				100		ppm/°C	
Non-linearity			0.1	0.2	0.3	%FSR	
Input characteristics	Signal input	voltage	20	1000	2000	V	
		current	0.2	10	20	A	
	Input impedance	voltage	50			M	
		current	1			mΩ	
Output characteristics	Signal output	voltage	0	10		V	
		current	0	20		mA	
	Load capacity	voltage	Vout=10V		2		kΩ
		current		0	350	500	Ω
	Signal output ripple	Unfiltered		10	20	mVRMS	
Power Supply input characteristics	Power supply	Voltage	3.3	12	24	VDC	
		Power		1		W	
		Range	-10		+10	%	
Other characteristic	operating temperature		-45		85	°C	
	storage temperature		-55		105	°C	
	weight				150	g	
Note:	normal load≤350Ω,if requiring load is 500Ω, Please note when ordering						

Pins function description:

Pin	Function Description	Pin	Function Description	Package
1	Power In +	9	Signal In+	International Standard DIN35 Rail Mounting
2	Power In -	10	Signal In+	
3	Signal Out+	11	Signal In+	
4	Signal Out-	12	Signal In+	
5	No pin (NC)	13	Signal In-	
6	No pin (NC)	14	Signal In-	
7	No pin (NC)	15	Signal In-	
8	No pin (NC)	16	Signal In-	

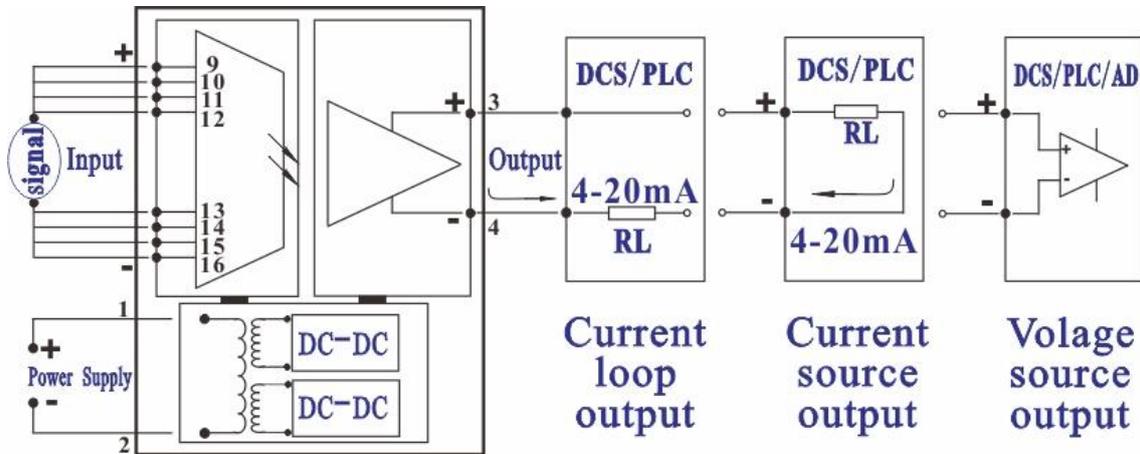


Application Wiring Diagram:

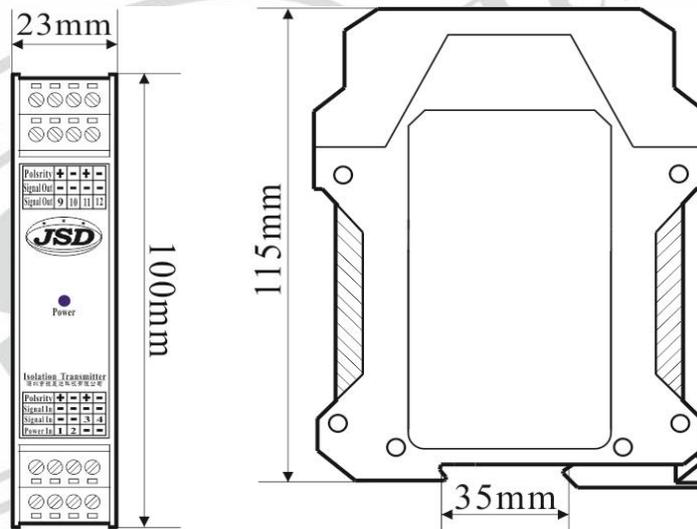


Risk of electrical shock

Please pay attention to safety when wiring input terminal



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、 NC" pin must not be connected to any external circuit, otherwise it will damage the product itself;
- 4、 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;
- 5、 the product is strictly forbidden demolish without permission for not damage;
- 6、 All specifications measured at Ta=25 ℃, 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.