1-input- 1-output analog voltage (current) signal isolation transmitter

Features:

◆Small size, low cost, international standards DIN35mm rail mounting
◆Three-port isolation (input, output, power supply and Mutual isolation between channels)
◆Passed CE Certificate
◆High accuracy (0.1% F.S, 0.2% F.S)
◆Full-scale range (<0.2% F.S)
◆High isolation voltage (3000VDC/60S)
◆Low temperature drift (100PPM/℃)
◆Wide operation temperature (-45~+85℃)
◆High reliability (MTBF>50 Wan hour)
◆Power supply (5VDC/12VDC/15VDC/24VDC multiple choice)
◆International standard signal input and output (0-5V/0-10V/1-5V/4-20mA/0-20mA, etc.)

Application:

◆DC current/voltage signal isolation, conversion and amplification
◆Industrial field signal isolation 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 sensor signal isolation, transformation and long-distance transmission
◆Instrumentation and sensor signal transceiver
◆Power isolation monitoring industrial field
◆Power monitoring, medical equipment isolation barrier
◆Overcome interference between instrumentation equipment

General Description:

JIE Sheng da Technology **JSD TA-1001D** active 1-in-1-out analog signal 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 better anti-EMC electromagnetic interference capability.

If 1-input-2-output/1-input-3-output/1-input-4-output/2-input-2-output/3-input-3-output isolation transmitter please purchase JSD TA-1002/JSD TA-1003/JSD TA-1004/JSD TA-2002 series and JSD TA-3003 series. AC power supply please purchase the JSD TA-X50X series,two-wire transmitter isolation please purchase JSD TA-1021D series, three-wire isolation transmitter please purchase JSD TA-1031D series

Selections and Definitions：

Product Selection Parameter List:				
signal input code：		**Power supply code：**	**output signal code：**	
Voltage(VDC)	Current(mA)	Power(VDC)	Current (mA)	Voltage(VDC)
1：0-5V	A：0-1mA	1：24VDC	1：4-20mA	4：0-5V
2：0-10V	B：0-10mA	2：15VDC	2：0-20mA	5：0-10V
3：0-75mV	C：0-20mA	3：12VDC	3：0-10mA	6：1-5V
4：0-2.5V	D：4-20mA	4：5VDC		
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：4-20mA；output：4-20mA；power supply：24VDC；model：JSD TA-1001D-D11

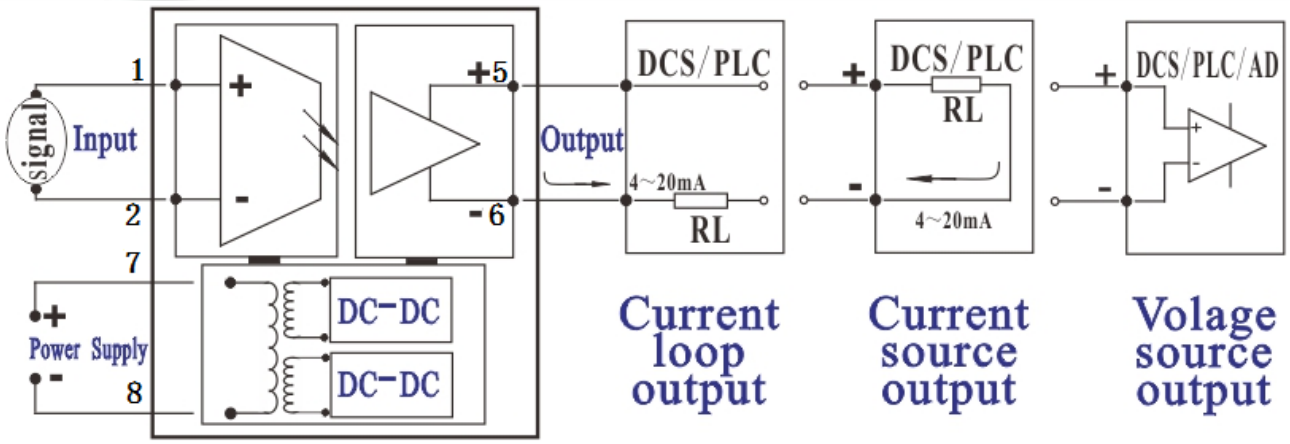
Example 2：input：0-3.3VDC；output：0-5VDC；power supply：12VDC；model：JSD-1001D-U34

Example 3：input：4-20mA；output：0-20mA；power supply：24VDC；model：JSD TA-1001D-D12

Electrical Characteristics：

Signs	Item		Test condition	Min	Typ.	Max	Units
Isolation characteristics	Isolation voltage		AC,50Hz,tested for 1 minute, humidity<70% leakage current < 1mA,)		3000		V(rms)
Transmission characteristics	Gain				1		V/V
	Gain drift				100		ppm/℃
	Non-linearity				0.1	0.2	%FSR
Input characteristics	Input offset voltage				2	5	mV
	Input impedanc	voltage		0.3	1		M
		current			250	1000	Ω
Output characteristics	Signal output	voltage		0		10	V
		current		0		20	mA
	Load capacity	voltage	Vout=10V		2		kΩ
		current		0	350	650	Ω
	Frequency		-3DB		1		KHz
	Response Time				≤ 1		mS
	Signal output ripple		Unfiltered		10	20	mVRMS
	Signal voltage drift		-45-+85℃			0.2	mV/℃
Power Supply input characteristics	Power supply	voltage		3.3	12	24	VDC
		Power			0.5	1	W
		Range		-10		+10	%
	operating			-45		85	℃
	storage temperature			-55		105	℃
	SIZE			94.5*25.5*41			mm
	weight				60		g
Note:	**normal load≤350Ω,if requiring load is 650Ω, Please note when ordering**						

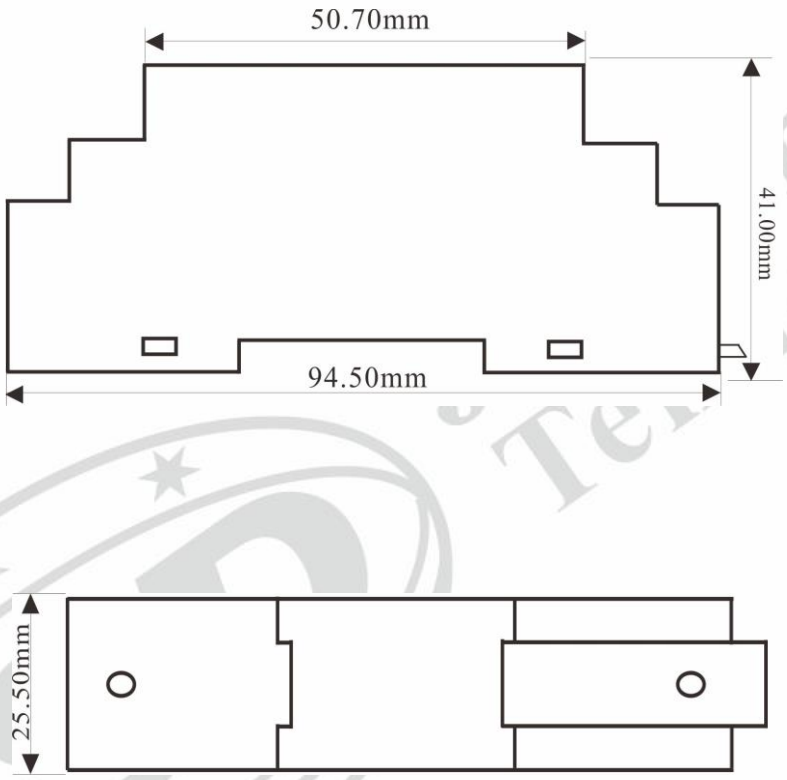
Application Wiring Diagram:



Pins function description:

Signal types	Pin	Function	Pin	Function	storage
Voltage (Current) in/out	1	Signal Input+	5	Signal Output +	Standard DIN35 Rail mounting
	2	Signal Input-	6	Signal Output -	
	3	No pin (NC)	7	Power supply In +	
	4	No pin (NC)	8	Power supply In -	

Product Dimensions:



Notes:

1、NC" pin must not be connected to any external circuit, otherwise it will damage the product itself;
2、Please read the user manual carefully before using. If any question please contact our technical support department.
3、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.
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.