



1-input-1-output passive two-wire 4-20mA isolation transmitter

Features:

- ◆ Small size, low cost, No correction directly use
- ◆ Input, Output isolation
- ◆ 1-input-1-output
- ◆ High accuracy (0.1% F.S, 0.2% F.S)
- ◆ High linearity (0.1% F.S)
- ◆ High isolation voltage (3000VDC/60S)
- ◆ Low temperature drift (35PPM/°C)
- ◆ Low impedance (voltage drop <3V, 20mA)
- ◆ Wide Industrial class operation temperature (-45~+85°C)
- ◆ Wide voltage input (7.5V~32V)
- ◆ High reliability (MTBF>50Wan hour)
- ◆ Passed CE Certificate
- ◆ International standard signal input and output (4-20mA/0-20mA)

Application:

- ◆ DC current/voltage signal isolation, conversion and amplification
- ◆ Analog signal ground interference suppression and analog isolation, acquisition
- ◆ 4-20mA/0-20mA sensor signal isolation, transformation and signal distribution conversion
- ◆ Instrumentation and sensor signal transceiver
- ◆ Two-wire primary/secondary instrumentation signal acquisition and isolation
- ◆ Power isolation monitoring industrial site
- ◆ Analog signal data isolation, acquisition, conversion, and distance transmission
- ◆ Industrial field signal isolation and conversion, and distance transmission without distortion
- ◆ Power monitoring, medical equipment isolation barrier
- ◆ Overcome inverter, large motors, power equipment, acquisition systems, DCS and PLC Field interference

General Description:

JIE Sheng Da Technology [JSD TAW-1001-100L](#) two-wire passive single-channel 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 system. The product is isolated between input and output , the isolated voltage is up to 3000VDC .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. **or multi-channel isolation transmitter please choose [JSD TAW-2002-100L](#), [JSD TAW-3003-100L](#),[JSD TAW-4004-100L](#) series.**

Selections and Definitions:

Product Selection Parameter List:	
Signal Input:	Output Signal:
Current(mA)	Current(mA)
4-20mA	4-20mA
0-20mA	0-20mA



JSD TAW-1001-100L Series Analog 4~20mA Signal Isolation Transmitter

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)	
	Insulation resistance	500VDC (input/output)		100		MΩ	
Transmission characteristics	Gain drift			±35	±50	ppm/°C	
	Non-linearity			±0.1	±0.2	%FSR	
	Output voltage range		10	24	30	VDC	
	Signal	current	4	20	30	mA	
	Signal	current	4		20	mA	
	Load capacity	current	RL≤(Us-5)/0.02 Us:Loop power supply voltage		250		Ω
	Frequency Response	Small-signal bandwidth,Io=20mA		50			Hz
	Signal output ripple			5	10		mVRMS
Power input characteristics	Power supply	voltage	---	---	---	VDC	
		Power loss	---	---	---	W	
		Range	---	---	---	%	
	operating temperature		-45		85		°C
	storage temperature		-55		105		°C
	weight						g
	size		115*100*23				mm
	Note	normal load ≤ 300Ω					

Selection Example:

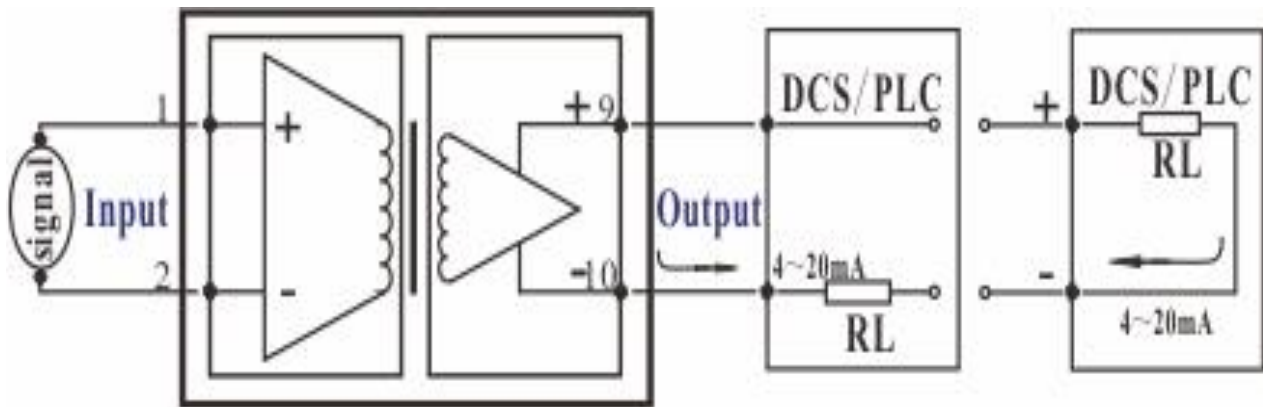
Example1: Current Input :4-20mA; Current Output :4-20mA; Model: JSD TAW-1001-100L

Example2: Current Input :0-20mA; Current Output :0-20mA; Model: JSD TAW-1001-100L

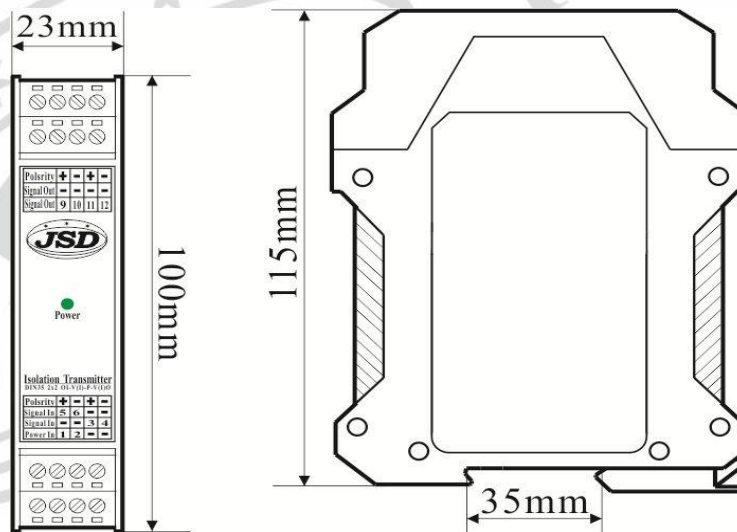
Pins Function Description:

Outputting typ.	Pin	Function	Pin	Function	Storage
Three-channel passive 4-20mA current output	1	Current input +	9	Current output +	Standard DIN35 rail mounting
	2	Current input -	10	Current output -	
	3	NC	11	NC	
	4	NC	12	NC	
	5	NC	13	NC	
	6	NC	14	NC	
	7	NC	15	NC	
	8	NC	16	NC	

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.