

JSD TAW-2002-100L Series Analog 4~20mA Signal Isolation Transmitter

2-input-2-output passive two-wire 4-20mA isolation transmitter

Features:

- ◆Small size, low cost, No correction directly use
- ◆Input, Output and multiple port isolation each other
- ◆2-input-2-output
- ◆ High accuracy (0.1% F.S, 0.2% F.S)
- ♦ High linearity (0.1% F.S)
- ◆High isolation voltage (3000VDC/60S)
- lacktriangleLow temperature drift (35PPM/ $^{\circ}$ C)
- ◆Low impedance (voltage drop <3V, 20mA)
- ♦ Wide Industrial class operation temperature $(-45 \sim +85 \,^{\circ}\text{C})$
- ♦ 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-2002-100L two-wire passive Dual-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 output and channel, 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-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



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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		ΜΩ		
	Gain drift				±35	±50	ppm/°C		
Transmission characteristics	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 current		RL≤(Us−5)/0.02 Us:Loop power supply voltage		250	6	Ω		
	Frequency Response		Small-signal bandwidth,Io=20mA		50	07	Hz		
	Signal output ripple				5	10	mVrms		
Power input characteristics	Power supply	voltage		-4	7	2	VDC		
		Power loss				_	W		
		Range					%		
	operating temperature		_6,}	-45		85	$^{\circ}$ C		
	storage temperature		E	-55		105	$^{\circ}\mathbb{C}$		
	weight						g		
	size		115*100*23						
Note	normal load $\leq 300\Omega$								

Selection Example:

Example1: Current Input 1:4-20mA; Current Output 1:4-20mA; Current Input 2:4-20mA; Current Output 2:4-20mA; Model: JSD TAW-2002-100L

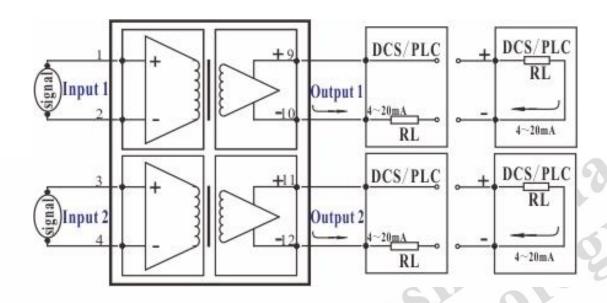
Example2: Current Input :0-20mA; Current Output :0-20mA; Current Input 2:0-20mA; Current Output 2:0-20mA; Model: JSD TAW-2002-100L

Pins Function Description:

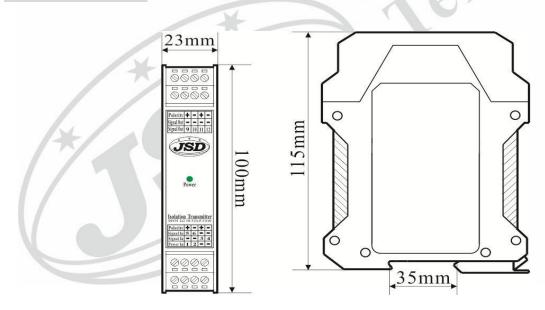
Outputting typ.	Pin	Function	Pin	Function	Storage
Two-channel passive 4-20mA	1	Current input 1+	9	Current output1 +	
	2	Current input 1-	10	Current output1 -	
	3	Current input 2+	11	Current output2 +	Standard
	4	Current input 2-	12	Current output2 -	DIN35
current output	5	NC	13	NC	rail
Current output	6	NC	14	NC	mounting
	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 ℃, 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.