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

## Features:

- ♦ Small size, low cost, No correction directly use
- ◆ Multiple port isolation
- ♦4-input-4-output mutual isolation between channels
- ◆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  $(-45 \sim +85^{\circ}C)$
- ♦ 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-4004-100L** two-wire passive Four-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.

For 1-in-1-out isolated transmitter/2-in-2-out isolated transmitter/3-in-3-out isolated transmitter please purchase JSD TAW-1001-100L series; JSD TAW-2002-100L series; JSD TAW-3003-100L series;

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

## **Selections and Definitions:**



JSD TAW-4004-100L Series Analog 4~20mA Signal Isolation Transmitter

## **Electrical Characteristics:**

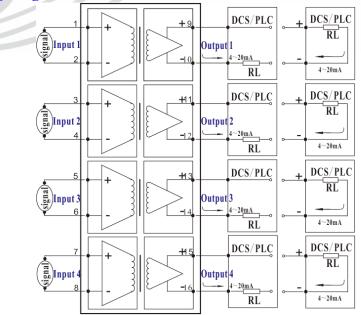
Signs	Iter	n	Test Condition	Min	Тур.	Max	Units
Isolation characteristics	Isolation voltage		AC,50Hz,(Tested for 1 minute humidity<70% ,leakage current < 1mA,)		3000		V(rms)
	Insulation resistance		500VDC (input/output)		100		MΩ
Transmission characteristics	Gain drift				±35	±50	ppm/°C
	Non-linear	ity			±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	2	Ω
	Frequency Response		(Small-signal bandwidth)Io=20mA		50	5	Hz
	Signal output ripple				5	10	mVrms
Other characteristic	operating		( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	-45		85	°C
	storage temperature			-55		105	°C
	weight				136		g
	size		115*100*23				mm

Selection Example: Input 1:4-20mA; output 1:4-20mA; Input 2:4-20mA;output 2:4-20mA;Input 3:4-20mA;output 3:4-20mA; Input 4:4-20mA; output 4:4-20mA;Model: JSD TAW-4004-100L

## **Pins Function Description:**

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

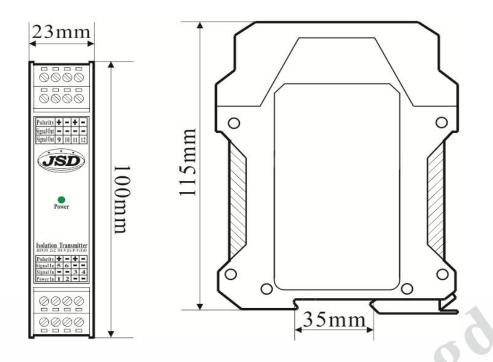
# **Application Wiring Diagram**:





JSD TAW-4004-100L Series Analog 4~20mA Signal Isolation Transmitter

**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 DC power source. It is forbidden to use 220VAC power supply. "NC" pin must not be connected to any external circuit, otherwise it will damage the product itself;
- 3. This product layout dimension are "mm" and "inch" as the unit, within "[]" are inch;
- 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°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.

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