



Single-channel two-wire Passive 4-20mA Loop Power isolation transmitter

Features:

- ◆ Low cost, small size, international standard DIN35 rail mounting
- ◆ 3000VDC isolation voltage between input and output
- ◆ Operation requires no external power supply, no external components
- ◆ 4-20mA input/4-20mA output
- ◆ Industrial temperature range: -45~+85 °C
- ◆ High accuracy: 0.3%, 0.4%,0.5%
- ◆ High linearity (non-linearity <0.1%)
- ◆ Output Loop Power Supply Voltage (10-30VDC)

Application:

- ◆ Analog signal data isolation、 acquisition
- ◆ Industrial field signal isolation
- ◆ Long-distance lossless transmission
- ◆ Analog signal ground interference suppression
- ◆ 4-20mA isolated signal transmission
- ◆ Supply power to the front-end two-wire equipment
- ◆ Instrumentation and sensor signal transceiver
- ◆ Transducer , large generators, equipment EMC interference suppression
- ◆ Power monitoring, medical equipment isolation safety barrier

General description:

Jieshengda Technology **JSD TAW-1001D-100L-F** series isolation transmitter is a two-wire loop powered isolation transmitter distributor, It adopts electromagnetic isolation technology, supply power to the two-wire inputting devices, effective solution to the current signal isolation depends on the power supply and achieve the 4-20mA standard signal isolation and transmission, Can be matched with a variety of instruments analog signal input interface (PLC, DCS systems, etc.). Analog signal input with overcurrent protection, Can effectively protect the module and the post-stage circuit; addition, the module's isolation voltage between input and output can be up to 3000VDC. it is available to keep high output accuracy, good linearity and low temperature drift. Suitable for using in vibration, damp industrial field.

Jieshengda Technology **JSD TAW-1001D-100L-F** series isolation transmitter adopt international standard DIN35mm rail mounting for easy user installation, the user just wire can achieve two-wire analog passive 4-20mA signal isolation, transmission and distribution conversion, and to achieve long-term distortion of the industrial field signal isolation and conversion without any external components, and can achieve signal transmission long-term lossless **or multi-channel isolation transmitter please choose JSD TAW-2002D-100L-F,JSD TAW-3003-100L-F,JSD TAW-4004-100L-F series.**

Product Selection Parameter List:

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

Selection Example:

Example: Input: 4-20mA; output: 4-20mA; two-wire output: 24VDC; Model: JSD TAW-1001D-100L-F

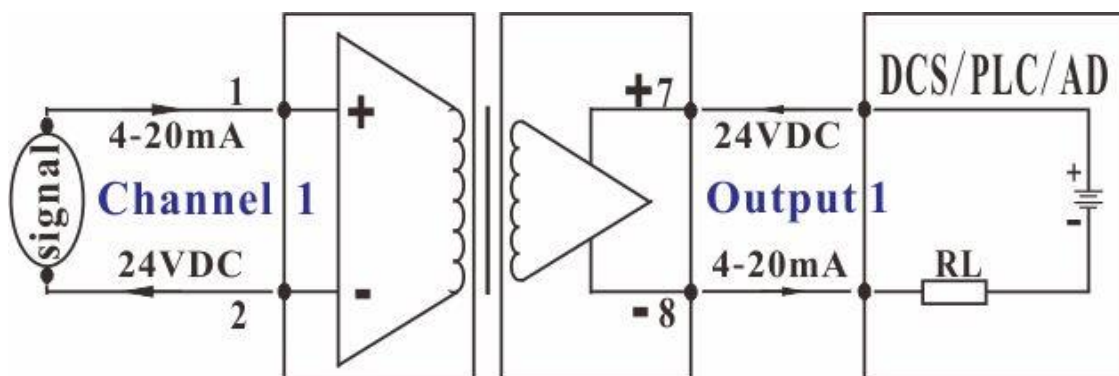
Electrical Characteristics:

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 Loop Power		10	30	40	VDC	
	Voltage Output	Input Loop Power Voltage Output		24		VDC	
	Signal Input	current		4	20	30	mA
	Signal Output	current		4		20	mA
	Load capacity	current	$RL \leq (U_s - 5)/0.02$ Us: Loop power supply voltage		250		Ω
	Frequency Response	Small-signal band width, I _o =20mA			50		Hz
Power input characteristics	Signal output ripple			5	10	mVRMS	
	Power supply	Voltage		---	---	---	VDC
		Power loss		---	---	---	W
		Range		---	---	---	%
	operating temperature		-45		85	°C	
	storage temperature		-55		105	°C	
	Weight		60			g	
	size		94.5*25.5*41				mm

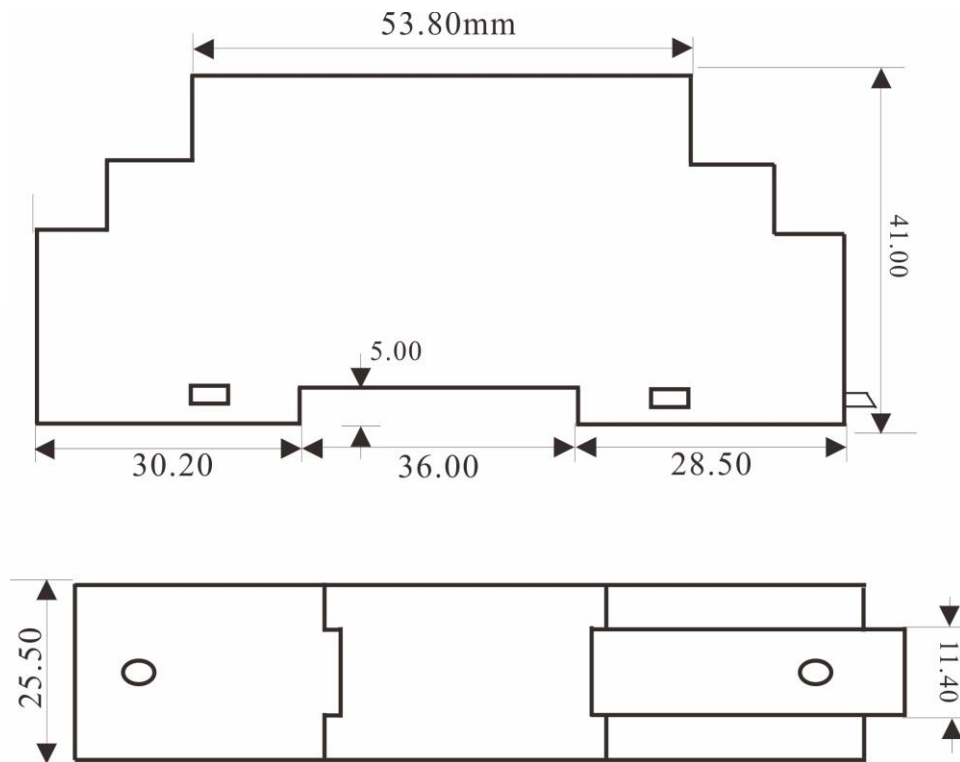
Pin Function Description:

Outputting types	Pin	Function	Pin	Function	Storage
Passive 4-20mA	1	Current Input	5	NO PIN	International Standard DIN35 Rail mounting
	2	Voltage output	6	NO PIN	
	3	NO PIN	7	Power Input	
	4	NO PIN	8	Current Output	

Wiring application diagram:



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 $T_a=25\text{ }^\circ\text{C}$, 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.