JSD TAM-1503 Series Analog Signal Isolation Transmitter

1- input-3-output high accuracy isolation transmitter (AC power supply series)

Features:

- ◆Small size, low cost, international standards DIN35mm rail mounting
- ◆Seven-port isolation (input, output and power supply)
- ◆1-input- 3output ,isolated between channels
- ♦ High accuracy (0.1% F.S, 0.2% F.S)
- ♦ High linearity (0.1% F.S)
- ◆High isolation voltage (2500VDC/60S)
- ◆Low temperature drift (35PPM/°C)
- ◆Wide Industrial class operation temperature (-45~+85°C)
- ◆High reliability (MTBF>50 Wan hour)
- ◆Power supply:220VAC
- ♦ International standard signal input and output $(0\sim5V/0\sim10V/4\sim20\text{mA}/0\sim20\text{mA}/0\sim\pm10V/0\sim\pm20\text{mA}$ etc.)

Applications:

- ◆DC current/voltage signal isolation, conversion and amplification
- ◆ Analog signal ground interference suppression and analog isolation, acquisition
- ◆4~20mA/0~±10V/0~±20mA sensor signal isolation, transformation and signal distribution, conversion
- ◆Instrumentation and sensor signal transceiver
- ◆ Power isolation monitoring industrial site
- ◆ Analog signal data isolation, acquisition, conversion, and long-distance transmission
- ◆ Industrial field signal isolation and conversion, and long-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:

JieShengda Technology (JSD) JSD TAM-1503 series high accuracy isolation transmitter adopts 220VAC power supply, it 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 2500VDC .it is Seven-port isolation, It is widely used in the industrial measurement systems, power, chemical, aerospace control, environmental protection, oil exploration, analog signal isolation, transmission, transformation, distribution and collection. etc. Adopting high efficiency electromagnetism isolation technology to achieve signal isolation, transmission, transformation, distribution and acquisition, it is available to keep high output accuracy, good linearity and low temperature drift. Suitable for using in vibration, damp industrial field, the standard DIN35mm rail mounting for easy user installation. DC power supply are another series products, special can customize

Product Selection Parameter List:									
signal input code:				Pow	er supply code:	output signal code:			
Voltage(VDC)		Current(mA)		5:	220VAC	1:	4~20mA		
1:	0~5V	A:	0~1mA			2:	0~20mA		
2:	0~10V	B:	0~10mA			3:	-20~+20mA		
3:	0~75mV	C:	0~20mA			4:	0~5V		
4:	0~2.5V	D:	4~20mA			5:	0~10V		
5:	0~±5V	E:	0~±1mA			6:	1~5V		
6:	0~±10V	F:	0~±10mA			7:	0~±5V		
7:	0~±100mV	G:	0~±20mA			8:	0~±10V		
U:	User-defined	U:	User-defined	U:	User-defined	U:	User-defined		



Selection Example:

- Example 1: Signal Input 1: 4-20mA; Signal Output 1: 4-20mA; Signal Output 2: 4-20mA; Signal Output 3: 4-20mA; Power Supply: 220VAC; Model: JSD TAM-1503-D51
- Example 2: Signal Input 1: 0-10VDC; Signal Output 1: 0-5VDC; Signal Output 2: 0-5VDC; Signal Output 3: 0-5VDC; Power Supply: 220VAC; Model: JSD TAM-1503-254
- Example 3: Signal Input 1: 0-10mA; Signal Output 1: 1-5VDC; Signal Output 2: 1-5VDC; Signal Output 3:1-5VDC, Power Supply: 220VAC; Model: JSD TAM-1503-B56
- Example 4: Signal Input 1: 0-5VDC; Signal Output 1: 0-5V; Signal Output 2: 4-20mA; Signal Output 3: 0-±10VDC; Power Supply: 220VAC; Model: JSD TAM-1503-15418
- Example 5: Signal Input 1: 0-±20mA; Signal Output 1: 0-10VDC; Signal Output 2: 0-10VDC; Signal Output 3:0-10VDC; Power Supply: 220VAC; Model: JSD TAM-1503-G55

Electrical Characteristics:

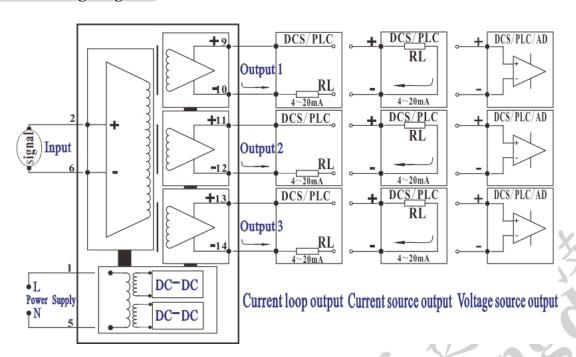
Signs	Item		Test Condition	Min	Type	Max	Units	
Isolation characteristics	Isolation voltage		AC,50Hz,(Tested for 1 minute humidity<70%, leakage current < 1mA)		2500		V(rms)	
Transmission	Gain error				1		V/V	
characteristics	Gain drift Non-linearity				35		ppm/℃	
characteristics	Non-linearity				0.1	0.2	%FSR	
/*	Signal	voltage		0		15	V	
Input	input	current		0		30	mA	
characteristics	Input offse	et voltage			2	5	mV	
Character istics	Input	voltage			1		M	
7//	impedan	current				50	Ω	
	Signal	voltage		-10		10	V	
Output	output	current		-20		20	mA	
characteristics	Load	voltage	Vout=10V		2		kΩ	
characteristics	capacity	current		0	350	500	Ω	
	Signal out	put ripple	Unfiltered		10	20	mVrms	
Power	Power	Voltage		90	220	264	VDC	
input	supply	Power loss			2		W	
Other	operating temperature			-45		85	$^{\circ}$	
characteristics	storage temperature			-55		105	$^{\circ}$	
Characteristics	Weight				156		g	
Note:	Normal load $\leq 350\Omega$, if required load 500Ω , please note when ordering .							

Pin Function Description:

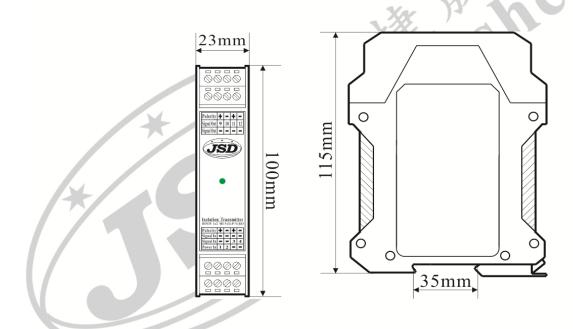
Signal Type	Pin	Function Description	Pin	Function Description	Package	
	1	Power supply L	9	Signal Output + 1		
	2	Signal Input + 1	10	Signal Output - 1	Ŧ	
1-input-	3	(NC)	11	Signal Output + 2	International Standard DIN35	
3-output	5	(NC)	12	Signal Output - 2		
Voltage		Power supply N	13	Signal Output +3		
/Current	6	Signal Input - 1	14	Signal Output -3	Rail Mounting	
	7	(NC)	15	(NC)	Mounting	
	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 220AC "NC" pin can not be connected to any external circuit, or it will damage the product itself;
- 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, To avoid invalid, or any failure, users disassemble this product is forbidden
- 4. the product is strictly forbidden demolish without permission for not damage
- 5. All specifications measured at Ta=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified.
- 6. In this datasheet, all the test methods of indications are based on corporate standards.