

THG-IP Series Current Input Distribution Isolator

- DC24V power supply provides isolated distribution power for on-site transmitters, while transmitting the current signal generated by the transmitter from the on-site isolation to the control room, PLC, DCS, etc
- Input interface current source, universal for two wire and three wire transmitters; Internally, efficient magnetoelectric isolation technology is used, with input, output, and power sources isolated from each other, featuring high accuracy, high linearity, and low temperature drift.
- DIN rail independent installation method; Adopting a plug-in structure, the host and base can be equipped with electric plug and unplug for easy installation and maintenance.

SELECTION TABLE				
THG-IP	X	X	X	Instructions
Channel	1			1 IN 1 OUT
	2			1 IN 2 OUT
	5			2 IN 2 OUT
Input Signal	1			4-20mA
	2			0-20mA
Output Signal		1		4-20mA
		2		0-20mA
		4		0-5V
		6		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

THG-IPXXX
Eg: THG-IP111,1 IN 1 OUT,both input and output are DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input signal: 4-20mA;0-20mA
Distribution voltage:24V DC (max driving current 30mA)
Input impedance: ≤50Ω

Output

Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

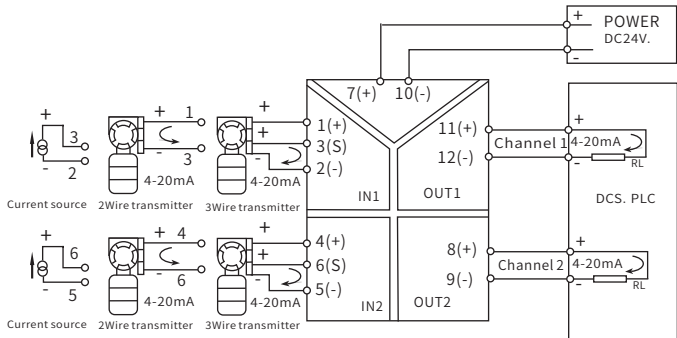
Basic Parameter

Power supply: DC24V±10%
Consumption current: ≤50mA (1 IN 1 OUT,DC24V,when 20mA output)
≤70mA (1 IN 2 OUT,DC24V,when 20mA output)
≤100mA (2 IN 2 OUT,DC24V,when 20mA output)

Basic accuracy: ≤0.1%F.S
Temperature drift:0.005%F.S/°C (-20°C~+55°C)
Response time:≤10mS(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)

Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: 2Wire,3wire transmitter,current source

WIRING DIAGRAM

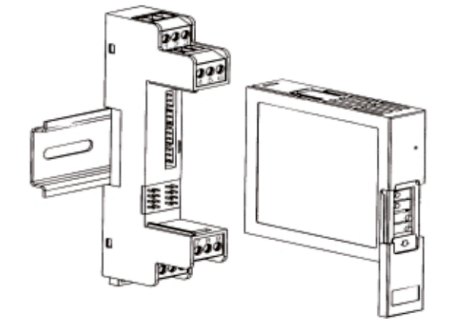
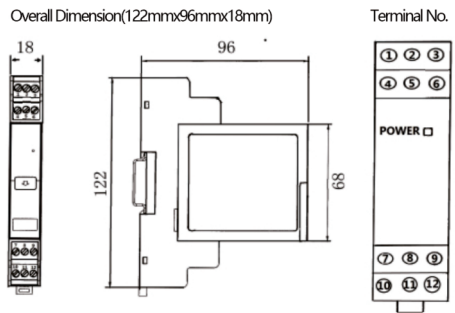


THG-IP511,2 IN 2 OUT

Note:1 IN 1 OUT,THG-IP111,only include channel 1 part
THG-IP211,1 IN 2 OUT,only include input of channel 1 part



OVERALL DIMENSION



THT-IP Series Current Input Distribution Isolator

- DC24V power supply provides isolated distribution power for on-site transmitters, while transmitting the current signal generated by the transmitter from the on-site isolation to the control room, PLC, DCS, etc.
- Input interface current source, universal for two wire and three wire transmitters; Internally, efficient magnetoelectric isolation technology is used, with input, input, and power sources isolated from each other, featuring high accuracy, high linearity, and low temperature drift.
- DIN rail independent installation method.

SELECTION TABLE				
THT-IP	X	X	X	Instructions
Channel	1			1 IN 1 OUT
	2			1 IN 2 OUT
Input Signal	1			4-20mA
	2			0-20mA
	3			0-10mA
Output Signal		1		4-20mA
		2		0-20mA
		4		0-5V
		6		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

THT-IPXXX
Eg: THT-IP111,1 IN 1 OUT,both input and output are DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input signal: 4-20mA;0-20mA
Distribution voltage:24V DC (max driving current 30mA)
Input impedance: ≤50Ω

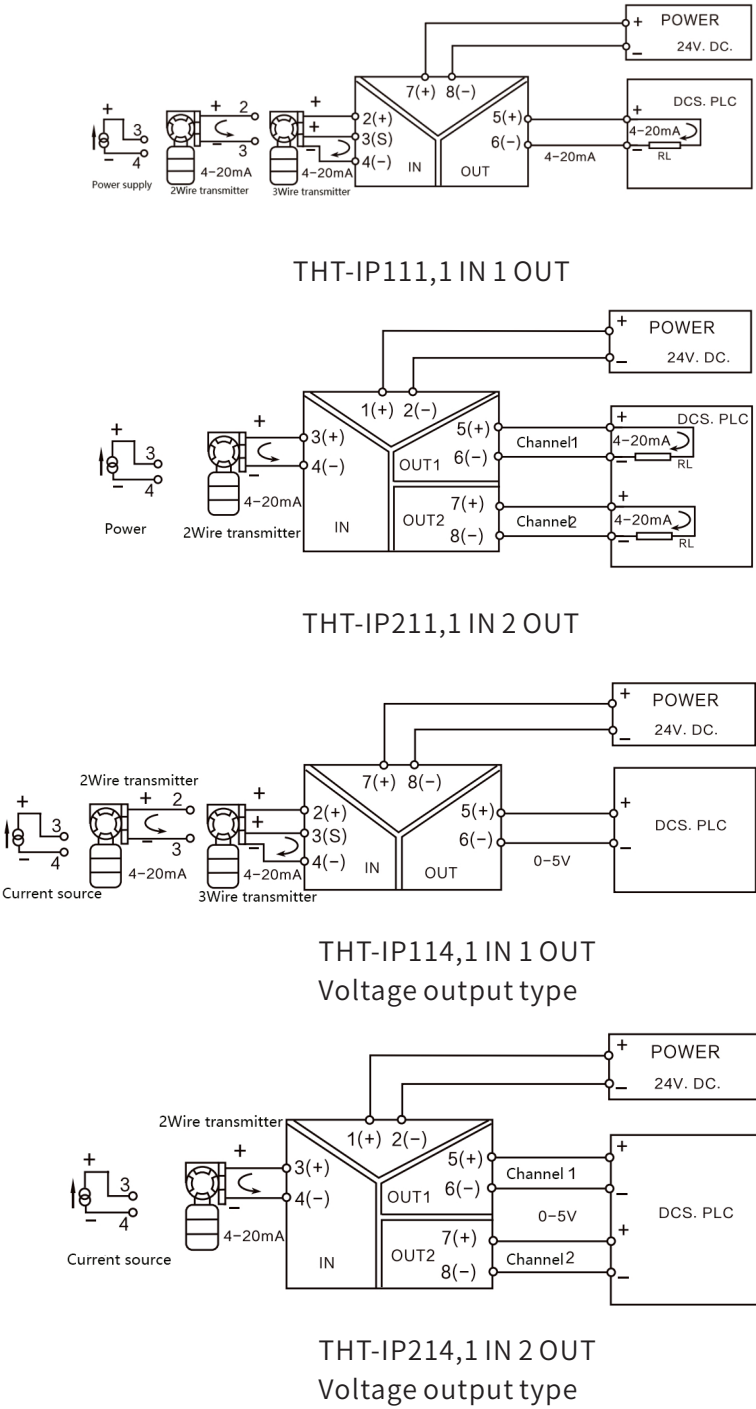
Output

Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

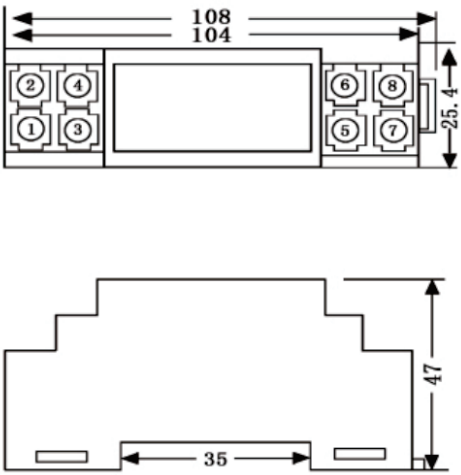
Basic Parameter

Power supply: DC24V±10%
Consumption current: ≤50mA (1 IN 1 OUT,DC24V,when 20mA output)
≤70mA (1 IN 2 OUT,DC24V,when 20mA output)
Basic accuracy: 0.1%F.S
Temperature drift:0.005%F.S/°C (-20°C~+55°C)
Response time:≤10mS(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: 2Wire,3wire transmitter,current source

WIRING DIAGRAM



OVERALL DIMENSION



THT-I/U Series Current/Voltage Input Signal Isolator

- DC24V Isolates and converts various signals such as voltage, current, and mv from industrial sites into standard current and voltage signals, and transmits them to control rooms, PLCs, DCS, and display instruments.
- DC24V Isolates and converts various signals such as voltage, current, and mv from industrial sites into standard current and voltage signals, and transmits them to control rooms, PLCs, DCS, and display instruments.

SELECTION TABLE				
THT-I/U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
	2			1 IN 2 OUT
Input Signal	1			4-20mA
	2			0-20mA
	4			0-75mV
	5			0-5V
	7			0-10V
Output Signal	1			4-20mA
	2			0-20mA
	4			0-5V
	6			0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

THT-IXXX
Eg: THT-I111,Current input,1 IN 1 OUT,both input and output are DC 4-20mA.
THT-UXXX
Eg: THT-U141,Voltage input,1 IN 1 OUT,input:0-75mv, output:4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input signal: 4-20mA;0-20mA;0-75mV;0-5v;0-10v etc.
Input impedance: Current input≤100Ω,voltage input≥300KΩ

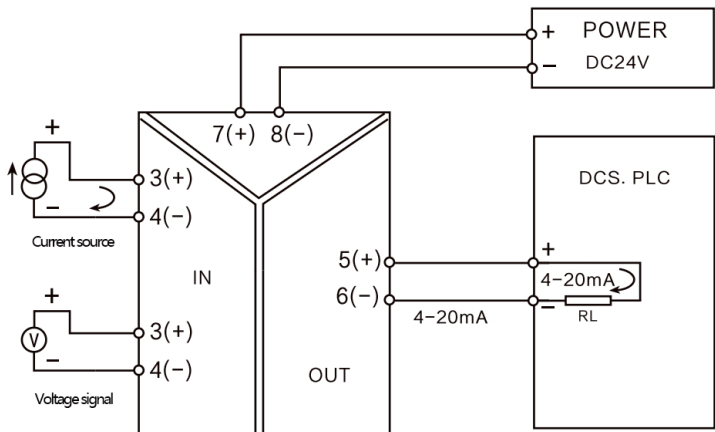
Output

Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

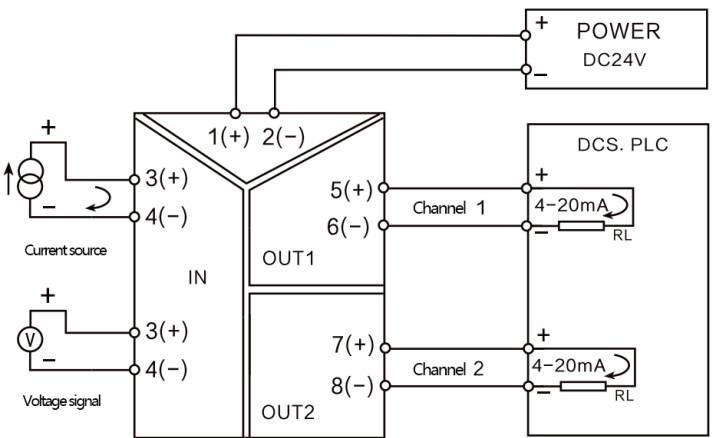
Basic Parameter

Power supply: DC24V±10%
Consumption current: ≤30mA (1 IN 1 OUT,DC24V,when 20mA output)
≤50mA (1 IN 2 OUT,DC24V,when 20mA output)
Basic accuracy: 0.1%F.S
Temperature drift:0.005%F.S/°C (-20°C~+55°C)
Response time:≤10mS(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: Current source,voltage signal output device.

WIRING DIAGRAM



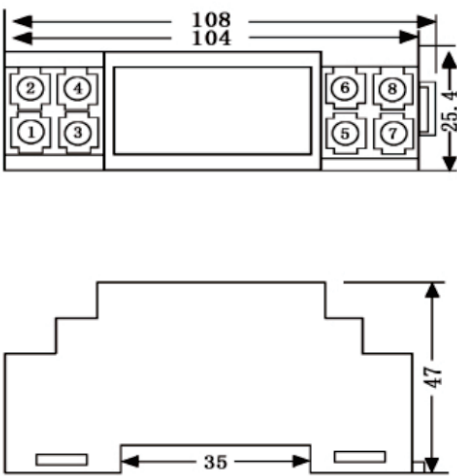
THT-U171,1 IN 1 OUT



THT-U271,1 IN 2 OUT



OVERALL DIMENSION



THT-I/U Series Current/Voltage Input Signal Isolator(Loop power supply)

- The THT-IP series passive isolator is used to connect to on-site two wire transmitters, provide power to them, and receive 4-20mA current signals from the two wire equipment output. After isolation, it outputs a 4-20mA current signal. Adopting a two wire loop power supply method, there is no need for external power supply.
- The THT-I/U series passive isolator receives DC current or DC voltage signals from the site, and after interference suppression, isolates and outputs a 4-20mA current signal. Adopting a two wire loop power supply method, there is no need for external power supply.
- DIN rail independent installation method.

SELECTION TABLE				
THT-I/U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	1			4-20mA
	2			0-20mA
	4			0-75mV
	5			0-5V
	7			0-10V
Output Signal		0		4-20mA (Output side power supply)

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

THT-IXXX
Eg: THT-I150,Loop power supply,1 IN 1 OUT,input:0-5v, output:4-20mA.
THT-UXXX
Eg: THT-IP110,Distribution type,1 IN 1 OUT,Loop power supply, both input&output are 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input signal: 4-20mA;0-20mA;0-75mV;0-5v;0-10v etc.
Input impedance: Current input≤100Ω,voltage input≥300KΩ

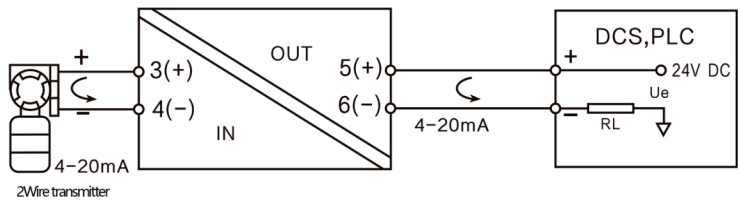
Output

Output signal:4-20mA
Output load resistance:RL≤500Ω

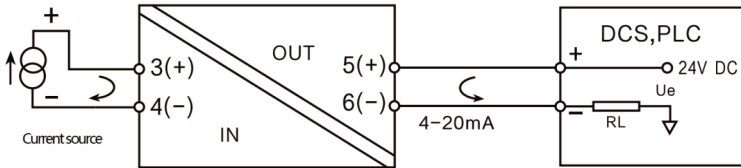
Basic Parameter

Power supply: None
Basic accuracy: 0.2%F.S
Temperature drift:0.005%F.S/°C (-20°C~+55°C)
Response time:≤10mS(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: 2Wire transmitter,Current source.

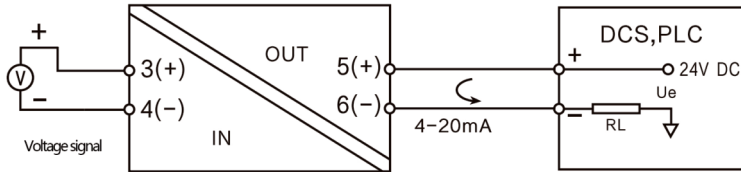
WIRING DIAGRAM



THT-IP110,1 IN 1 OUT



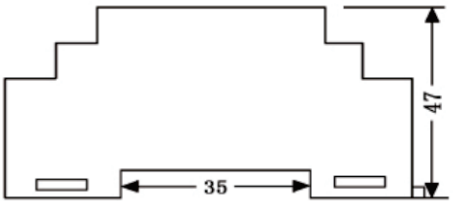
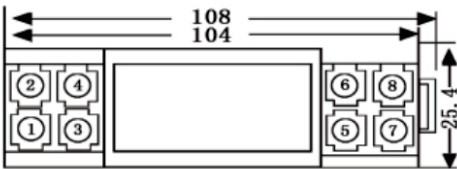
THT-I110,1 IN 1 OUT



THT-U150,1 IN 1 OUT



OVERALL DIMENSION



THT-I Series Passive Isolator

- The THT-I series passive isolator does not require external power supply, and takes power from the input signal to isolate and output the 4-20mA DC current signals of various equipment in the industrial field after interference suppression.
- DIN rail independent installation method. Input and output two port high reliability isolators.

SELECTION TABLE				
THT-I	X	X	X	Instructions
Channel	1			1 IN 1 OUT
	2			1 IN 2 OUT
	5			2 IN 2 OUT
Input Signal		0		4-20mA (Input side power supply)
Output Signal			1	4-20mA

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

THT-IXXX
Eg: THT-I101,1 IN 1 OUT,Input side power supply, input&output: 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input signal: 4-20mA;0-20mA
Pressure drop: 3V, TYP
Input impedance: 150Ω+output load resistance(THT-I101)

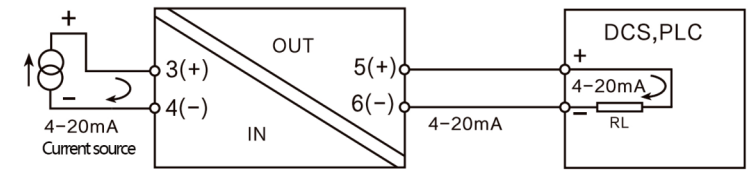
Output

Output signal:4-20mA
Output load resistance:RL≤350Ω (THT-I101)

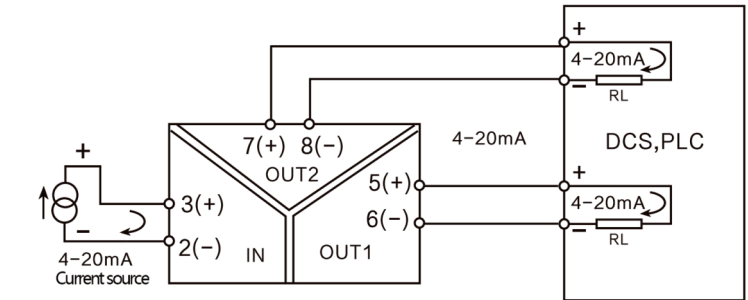
Basic Parameter

Power supply: None
Basic accuracy: 0.2%F.S
Temperature drift:0.005%F.S/°C (-20°C~+55°C)
Response time:≤10mS(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55°C
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: Current source.

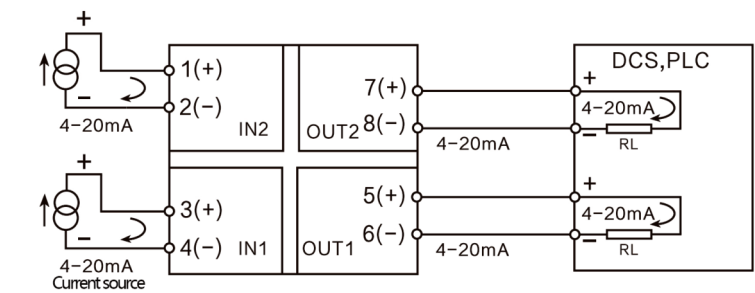
WIRING DIAGRAM



THT-I101,1 IN 1 OUT



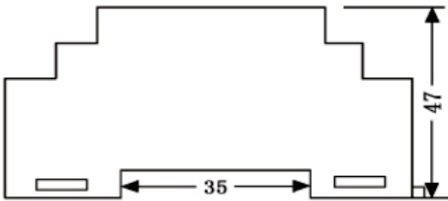
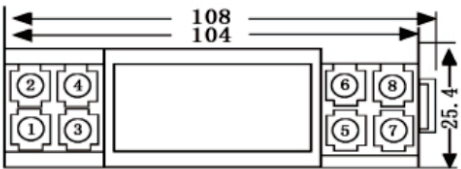
THT-I201,1 IN 2 OUT



THT-I501,2 IN 2 OUT



OVERALL DIMENSION



THT-RP Series Potentiometer Signal Isolator

- Receive the sliding resistance signal on site, transform it into standard signals such as 4-20mA, 0-5V with linear resistance values, and output it to DCS or other secondary instruments. Contains a sensor constant voltage source.
- DIN rail independent installation method.

SELECTION TABLE				
THT-RP	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal		A		0-500Ω
		B		0-1KΩ
		C		0-5KΩ
		D		0-10KΩ
Output Signal		0		4-20mA (Output side power supply)
		1		4-20mA
		2		0-20mA
		4		0-5V
		6		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

THT-RP1XX
Eg: THT-RP1D1,1 IN 1 OUT,Input:0-10KΩ, output：4-20mA.

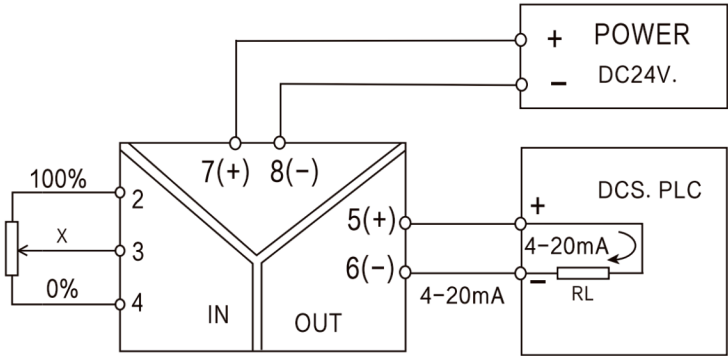
MAIN TECHNICAL PARAMETERS

Input
Potentiometer signal, input total resistance value: 500 Ω -10K Ω
Excitation voltage: 2.5V or 5V

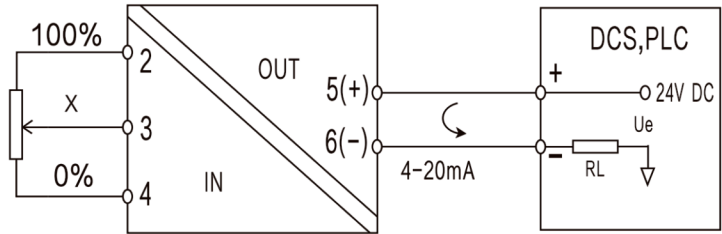
Output
Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter
Power supply: DC24V±10%
Consumption current: ≤50mA (1 IN 1 OUT,DC24V,when 20mA output)
Basic accuracy: 0.1%F.S
Temperature drift:0.005%F.S/°C (-20℃~+55℃)
Response time:≤10mS(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: Potentiometer

WIRING DIAGRAM



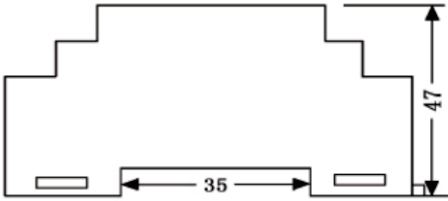
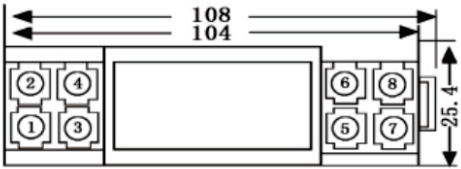
THT-RP1X1,1 IN 1 OUT



THT-RP1X0,1 IN 1 OUT
(Loop power supply)



OVERALL DIMENSION



THT-R Series Resistance Signal Isolator

- Isolate the resistance signal and convert it into standard signals such as 4-20mA and 0-5V. Contains precise constant current source excitation.
- DIN rail independent installation method.

SELECTION TABLE				
THT-R	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	A			0-500Ω
	B			0-1KΩ
	C			0-5KΩ
	D			0-10KΩ
Output Signal		0		4-20mA (Output side power supply)
		1		4-20mA
		2		0-20mA
		4		0-5V
		6		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

THT-R1XX
Eg: THT-R1D1,1 IN 1 OUT,Input:0-10KΩ, output: 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

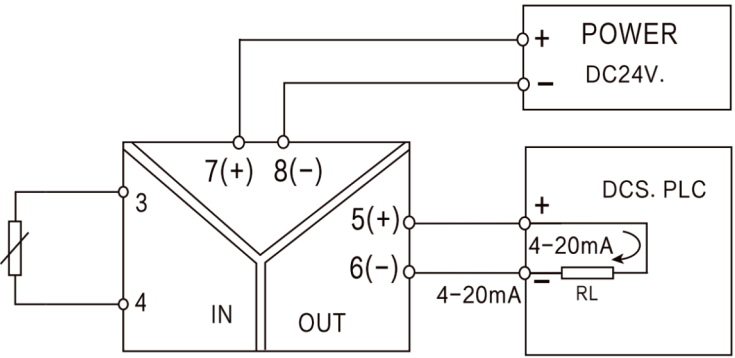
Input signal: Resistance signal,range:0 -100K Ω
Excitation method: Built-in precision constant source current excitation

Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

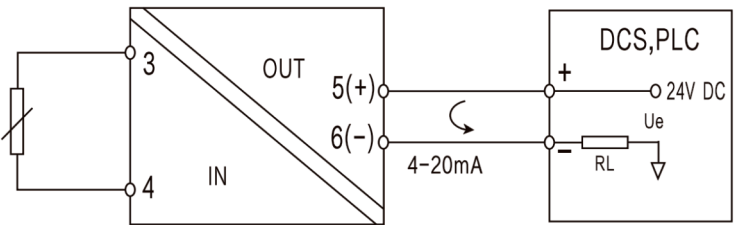
Basic Parameter

Power supply: DC24V±10%
Consumption current: ≤50mA (1 IN 1 OUT,DC24V,when 20mA output)
Basic accuracy: 0.1%F.S
Temperature drift:0.005%F.S/°C (-20°C~+55°C)
Response time:≤10mS(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

WIRING DIAGRAM



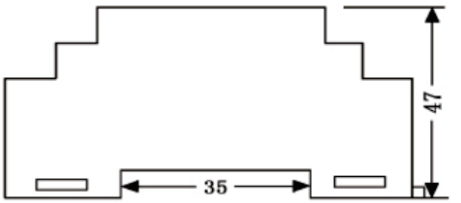
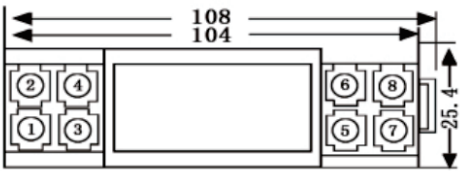
THT-R1X1,1 IN 1 OUT



THT-R1X0,1 IN 1 OUT
(Loop power supply)



OVERALL DIMENSION



TST-F Series Frequency Signal Isolator

- Isolate and convert industrial site frequency signals into standard signals such as 4-20mA and 0-5V.
- DIN rail independent installation method.

SELECTION TABLE				
TST-F	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal		A		0-60Hz
		B		45-55Hz
		C		0-1Kz
		D		0-10KΩ
		E		Customized
Output Signal			1	4-20mA
			2	0-20mA
			5	0-5V
			7	0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TST-F1XX
Eg: TST-F1D1,1 IN 1 OUT,Input:0-10KHz, output: 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Signal type:Pulse square wave or sine wave
Frequency range:1Hz-100KHz(Signals below 1Hz are cut off as 0Hz)
Customizable 0.1Hz-100KHz
Level:VL≤1V;4V≤VH≤12V

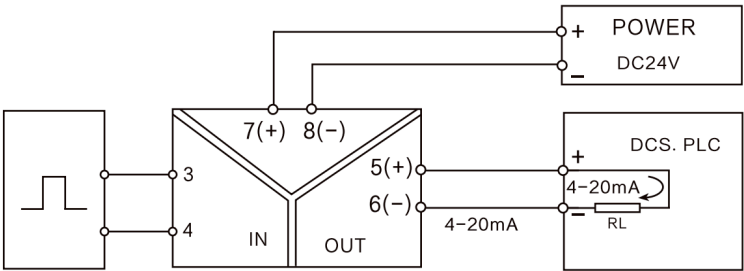
Output

Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

Power supply: DC24V±10%
Consumption current: ≤50mA(1 IN 1 OUT,DC24V,when 20mA output)
Basic accuracy: 0.1%F.S
Temperature drift:0.005%F.S/°C (-20°C~+55°C)
Response time:≤0.5S(0-90%)(TYP)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: Frequency signal source

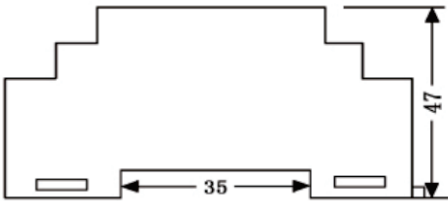
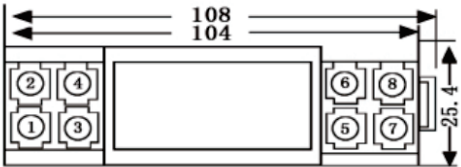
WIRING DIAGRAM



TST-F1X1,1 IN 1 OUT



OVERALL DIMENSION



TST-TC Series Thermocouple Temperature Isolation Transmitter

- Receive thermocouple signals from the site, isolate and loosen them to output standard current /voltage signals to the control room, PLC, DCS, and display instruments.
- The signal type, measurement range, alarm parameters, etc. can be programmed through PC software.
- High reliable isolation of input, output, and power supply three ports; DIN rail independent installation method.

SELECTION TABLE				
TST-TC	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	B			400~+1820℃
	E			-100~+1000℃
	J			-100~+1200℃
	K			-180~+1372℃
	N			-180~+1372℃
	R			-50~+1768℃
	S			-50~+1768℃
	T			-200~+400℃
Output Signal		1		0-40mA
		2		0-20mA
		4		0-5V
		6		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TST-TCXX
Eg: TST-TC1K1/0-500,Input:K model thermocouple(0-500℃), output:DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Signal type:B,E,J,K,N,R,S,T etc. thermocouple signal
Cold Junction Compensation:Compensation range:-20℃~-+60℃
Compensation method:Internal compensation
Cold end compensation accuracy:±1℃

Output

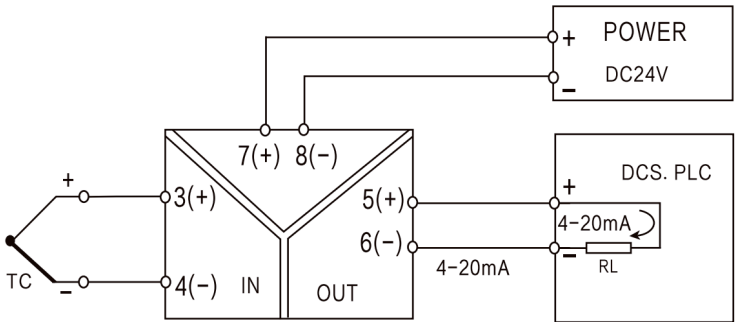
Output signal:4-20mA;0-20mA;0-5v;0-10v
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

Power supply: DC24V,voltage range:DC18-36V
Consumption current: ≤50mA (1 IN 1 OUT,DC24V,when 20mA output)
Over limit alarm: Below the lower temperature limit, output 3.8mA (at 4-20mA)
Above the upper temperature limit, output 20.5mA
Break even alarm: Output 22mA
(users can set specific values as alarm values within the range of 0-22mA)
Basic accuracy: 0.2%F.S
Temperature drift:0.005%F.S/℃ (-20℃~-+55℃)
Insulation strength:1500VAC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)

Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: Thermocouple

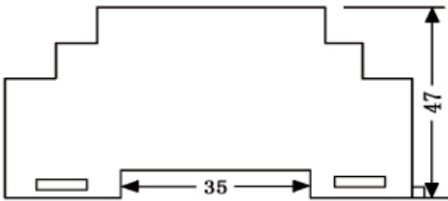
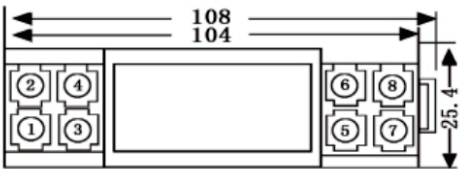
WIRING DIAGRAM



TST-TC1X1,1 IN 1 OUT



OVERALL DIMENSION



TST-TC Series Thermocouple Temperature Isolation Transmitter (Loop power supply)

- Receive thermocouple signals from the site, isolate and transmit standard 4-20mA current signals to the control room, PLC, DCS, and display instruments. Adopting a two wire circuit power supply, there is no need for external energy sources.
- The signal type, measurement range, etc. can be programmed through PC software.
- High reliable isolation of input and output; DIN rail independent installation method.

SELECTION TABLE				
TST-TC	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal		B		400~+1820℃
		E		-100~+1000℃
		J		-100~+1200℃
		K		-180~+1372℃
		N		-180~+1372℃
		R		-50~+1768℃
		S		-50~+1768℃
		T		-200~+400℃
Output Signal		0		4-20mA (Output side power supply)

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

When inputting thermocouples, the conversion accuracy does not include cold junction compensation error. For every 100 Ω increase in the compensation wire, the cold end error increases by 0.2 ℃.

When inputting B-type thermocouples, the lower limit of the temperature range must be greater than 680 ℃ to ensure that the accuracy indicators are met.

Product Selection

TST-TCXX

Eg: TST-TC1K0/0-500,Input:K model thermocouple(0-500℃), output: DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Signal type:B,E,J,K,N,R,S,T etc. thermocouple signal

Output

Output signal:4-20mA

Output load resistance:RL≤ (Ue-12) /0.022

Basic Parameter

Supply voltage: 12~30VDC

Alarm indication: Low limit overflow alarm, output current approximately 3.9mA

Upper limit overflow alarm, output current approximately 21mA

Wire breakage alarm, output current approximately 22mA

Basic accuracy: 0.2%F.S

Temperature drift:0.01%F.S/℃ (-20℃~+55℃)

Cold Junction Compensation:±1℃; Cold Junction Compensation:±3℃ (Compensation range:-20℃~+60℃)

Response time:90% of final value reached in 1 second

Power protection: Power reverse protection

Insulation strength:1500VAC/1min(Between input,output and power)

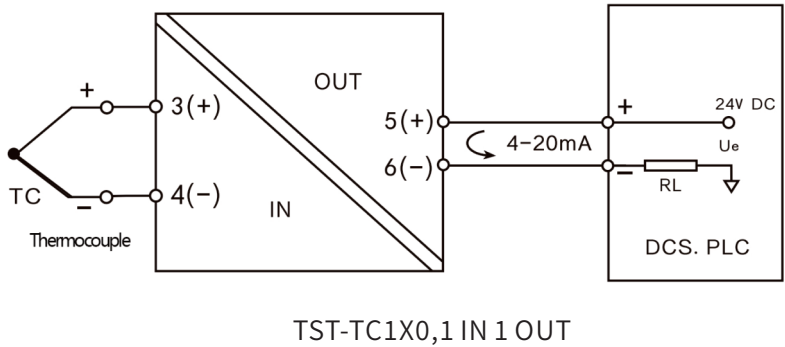
Insulation resistance:≥100MΩ(Between input,output,power and shell)

Working temperature range:-20~+55℃

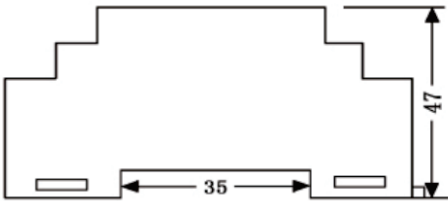
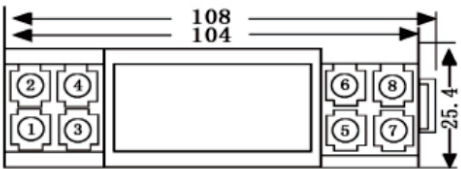
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

Applicable Field Equipment: Thermocouple

WIRING DIAGRAM



OVERALL DIMENSION



TST-TR Series Thermal Resistance Temperature Isolation Transmitter

- Receive the thermal resistance signal from the site, isolate and transmit the output standard current/voltage signal to the control room, PLC, DCS, and display instruments.

The signal type, measurement range, alarm parameters, etc. can be programmed through PC software.

- High reliable isolation of input, output, and power supply three ports; DIN rail independent installation method.

SELECTION TABLE				
TST-TR	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal		C5		Cu50(-50~+150℃)
		C1		Cu100(-50~+150℃)
		P1		Pt100(-200~+850℃)
		P2		Pt1000(-200~+250℃)
		N1		Ni100(-60~+180℃)
		N2		Ni1000(-60~+150℃)
Output Signal		0		4-20mA (Output side power supply)
		1		4-20mA
		2		0-20mA
		4		0-5V
		6		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TST-TRXX
Eg: TST-TR1P11/0-100,Input:PT100(0-100℃), output: DC 4-20mA.

MAIN TECHNICAL PARAMETERS

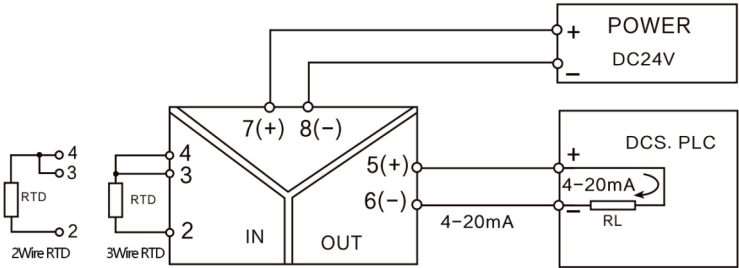
Input
Input signal:Pt100,Cu50,Ni1000 etc. thermal resistance signal
Permissible line resistance:≤22Ω

Output
Output signal:4-20mA;0-20mA;0-5V;0-10V
Output load resistance:RL≤500Ω (When output is current signal)
RL≥10KΩ (When output is voltage signal)

Basic Parameter
Supply voltage: DC24V,voltage range:DC18~36VDC
Consumption current: ≤50mA(1 IN 1 OUT,DC24V,When 20mA output)
Over limit alarm: Below the lower temperature limit, output 3.8mA (at 4-20mA)
Above the upper temperature limit, output 20.5mA
Break even alarm: Output 22mA
(users can set specific values as alarm values within the range of 0-22mA)
Basic accuracy: 0.1%F.S
Temperature drift:0.005%F.S/℃ (-20℃~+55℃)
Insulation strength:1500VAC/1min(Between input,output and power)

Insulation resistance:≥100MΩ(Between input,output,power and shell)
Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)
Applicable Field Equipment: Two wire,three wire thermal resistance

WIRING DIAGRAM

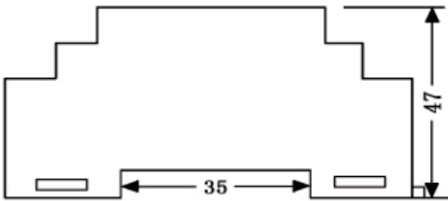
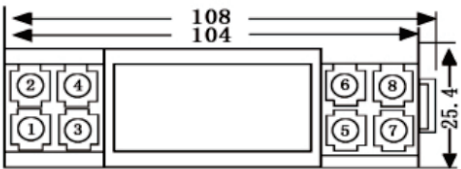


TST-TR1XX,1 IN 1 OUT

Note: When inputting the signal of a two wire heating resistor, terminals 3 and 4 must be short circuited.When inputting the signal of the three wire heating resistor, it is necessary to ensure that the resistance values of the three wires are equal as much as possible.



OVERALL DIMENSION



TST-TR Series Thermal Resistance Temperature Isolation Transmitter (Loop power supply)

- Receive the thermal resistance signal from the site, isolate and transmit the output standard 4-20mA current signal to the control room, PLC, DCS, and display instruments. Adopting a two wire circuit for power supply, there is no need for external power supply.
- The signal type, measurement range, etc. can be programmed through PC software. High reliable isolation of input and output; DIN rail independent installation method.

SELECTION TABLE				
TST-TR	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal		C5		Cu50 (-50~+150℃)
		P1		Pt100 (-200~+850℃)
Output Signal		0		4-20mA (Output side power supply)

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TST-TRXX
Eg: TST-TR1P10/0-100, Input: PT100(0-100℃), output: DC 4-20mA.

MAIN TECHNICAL PARAMETERS

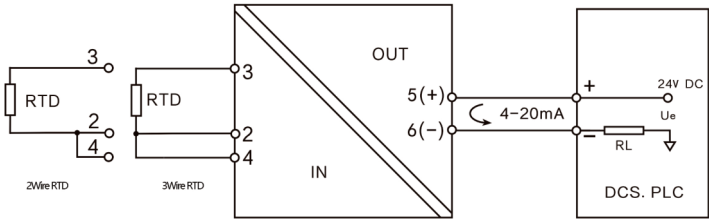
Input
Input signal: Pt100, Cu50 etc. thermal resistance signal

Output
Output signal: 4-20mA
Output load resistance: $RL \leq (U_e - 12) / 0.022$

Basic Parameter
Supply voltage: 12~30V DC
Alarm indication: Low limit overflow alarm, output current approximately 3.9mA
Upper limit overflow alarm, output current approximately 21mA
Wire breakage alarm, output current approximately 22mA

Basic accuracy: 0.2%F.S
Temperature drift: 0.01%F.S/℃
Insulation strength: 1500VAC/1min (Between input, output and power)
Response time: 90% of final value reached in 1 second
Power protection: Power reverse protection
Insulation resistance: $\geq 100M\Omega$ (Between input, output, power and shell)
Working temperature range: -20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1 (IEC61326-1)
Applicable Field Equipment: Two wire, three wire thermal resistance

WIRING DIAGRAM

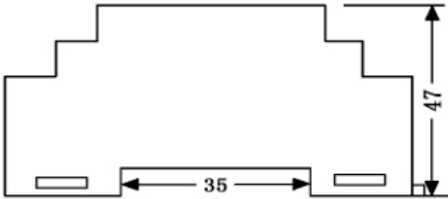
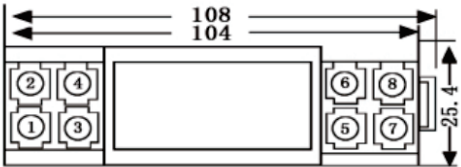


TST-TR1XX0,1 IN 1 OUT

Note: When inputting the signal of a two wire heating resistor, terminals 2 and 4 must be short circuited. When inputting the signal of the three wire heating resistor, it is necessary to ensure that the resistance values of the three wires are equal as much as possible.



OVERALL DIMENSION



TET-AI/AU Series AC Current/Voltage Transmitter (Loop power supply)

- The TET-AI/AU1X0 series AC current/voltage transmitter converts AC signals from transformers into standard process signals, used by DCS for central monitoring of motors, pumps, or heating networks, monitoring power supply lines and their current/voltage.
- Adopting a two wire loop power supply method, without the need for power supply; High reliable isolation of input and output.

SELECTION TABLE				
TET-AI/U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	A			0-1A
	B			0-5A
	C			0-10A
	D			0-100V
	E			0-300V
	F			0-500V
	Z			Customized
Output Signal		0		4-20mA (Output side power supply)

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TET-AIXX0
Eg: TET-AI1B0,1 IN 1 OUT,AC current input:0-5A, output : DC 4-20mA.
TET-AUXX0
Eg: TET-AU1E0,1 IN 1 OUT,AC voltage input:0-300V, output : DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC 0-10A
Input voltage range:AC 0-500V
Frequency range:40Hz-60Hz

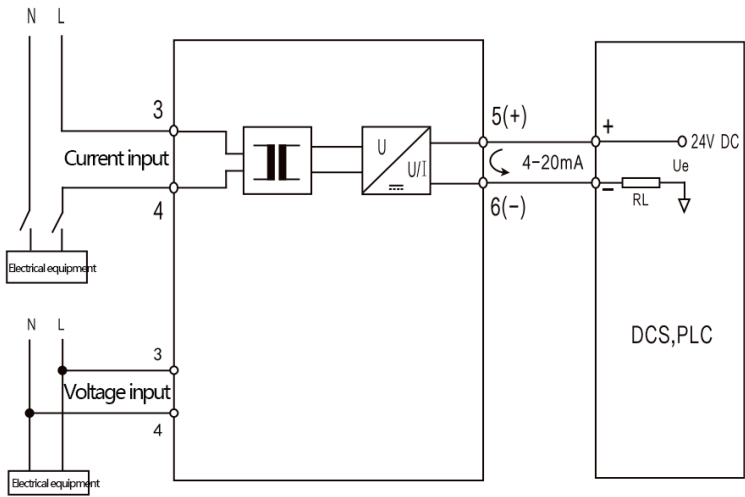
Output

Output signal:4-20mA;0-20mA;0-5V;0-10V
Output load resistance:RL≤500Ω (Output is current signal)

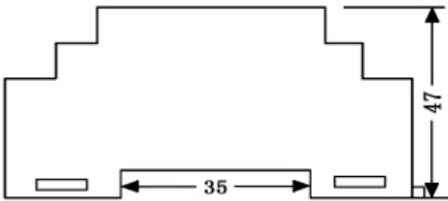
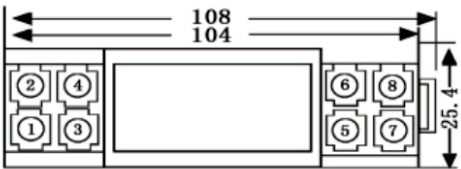
Basic Parameter

Basic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C
Response time:≤400mS(0-9%)(TYP)
Insulation strength:2000V AC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55℃

WIRING DIAGRAM



OVERALL DIMENSION



TET-AI/AU Series AC Current/Voltage Transmitter

- The TET-AI/AU series AC current and voltage transmitter converts AC signals from AC transformers or transformers into standard process signals, used by DCS for central monitoring of motors, pumps, or heating networks, monitoring the voltage and current of power supply lines.
- High reliable isolation of input, output, and power ports.

SELECTION TABLE				
TET-AI/U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal		A		0-1A
		B		0-5A
		C		0-10A
		D		0-100V
		E		0-300V
		F		0-500V
		Z		Customized
Output Signal			1	4-20mA
			2	0-20mA
			5	0-5V
			7	0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TET-AIXXX
Eg: TET-AI1B1,1 IN 1 OUT,AC current input:0-5A, output:DC 4-20mA.
TET-AUXXX
Eg: TET-AU1E1,1 IN 1 OUT,AC voltage input:0-300V, output:DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input current range:AC 0-10A
Input voltage range:AC 0-500V
Frequency range:40Hz-60Hz

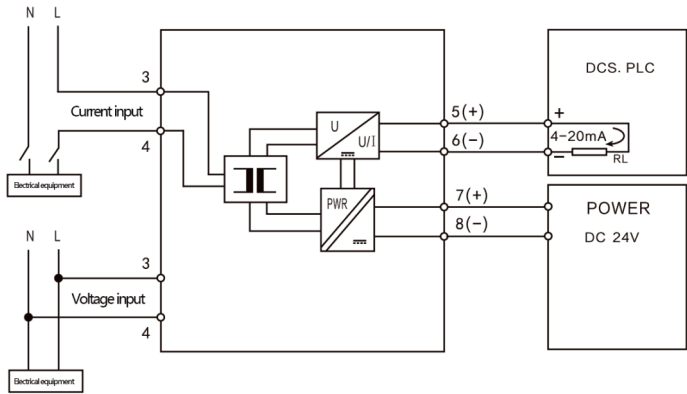
Output

Output signal:4-20mA;0-20mA;0-5V;0-10V
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

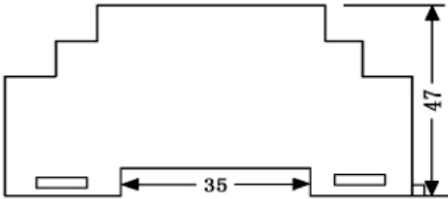
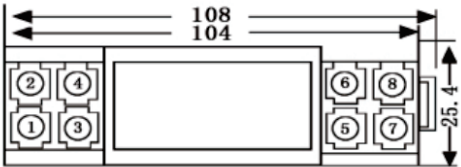
Basic Parameter

Supply voltage: DC24V±10%
Rated power:≤1W (1 IN 1 OUT,DC24V,when 20mA output)
Basic accuracy: ≤0.5%F.S
Temperature drift:0.02%F.S/°C
Response time:≤400mS(0-9%)(TYP)
Insulation strength:2000V AC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

WIRING DIAGRAM



OVERALL DIMENSION



TET-I/U Series DC Current/Voltage Transmitter

- TET-I/U is a process signal that converts DC current and voltage signals into standard signals.
Used for central monitoring of motors, pumps, or heating networks by DCS, monitoring power supply lines and their currents.
- The three ports of input, output, and power supply are highly reliable and isolated.

SELECTION TABLE				
TET-AI/U	X	X	X	Instructions
Channel	1			1 IN 1 OUT
Input Signal	A			0-1A
	B			0-5A
	C			0-10A
	D			0-100V
	E			0-300V
	F			0-500V
	Z			Customized
Output Signal		1		4-20mA
		2		0-20mA
		5		0-5V
		7		0-10V

Note: Customers need to determine the input signal form and output signal form when placing an order. If there are special needs, they can customize it

Product Selection

TET-IXXX
Eg: TET-I1B1,1 IN 1 OUT,AC current input:0-5A, output: DC 4-20mA.
TET-UXXX
Eg: TET-U1E1,1 IN 1 OUT,AC voltage input:0-300V, output: DC 4-20mA.

MAIN TECHNICAL PARAMETERS

Input

Input current range:DC 0-10A
Input voltage range:DC 0-500V

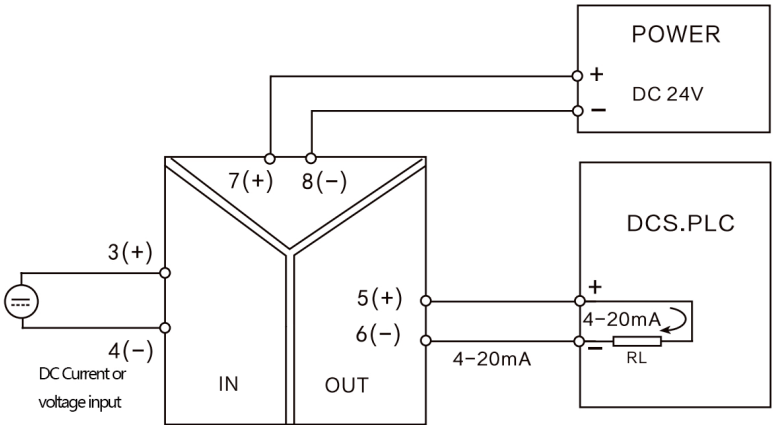
Output

Output signal:4-20mA;0-20mA;0-5V;0-10V
Output load resistance:RL≤500Ω (Output is current signal)
RL≥10KΩ (Output is voltage signal)

Basic Parameter

Power supply:DC24V±10%
Rated power:≤1W (1 IN 1 OUT,DC24V,When 20mA output)
Basic accuracy: ≤0.2%F.S
Temperature drift:0.02%F.S/°C
Response time:≤10mS(0-9%)(TYP)
Insulation strength:2000V AC/1min(Between input,output and power)
Insulation resistance:≥100MΩ(Between input,output and power)
Working temperature range:-20~+55℃
Electromagnetic Compatibility: According to GB/T 18268.1(IEC61326-1)

WIRING DIAGRAM



OVERALL DIMENSION

