Datasheet

Signal isolator

SUP-602S

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Signal isolator
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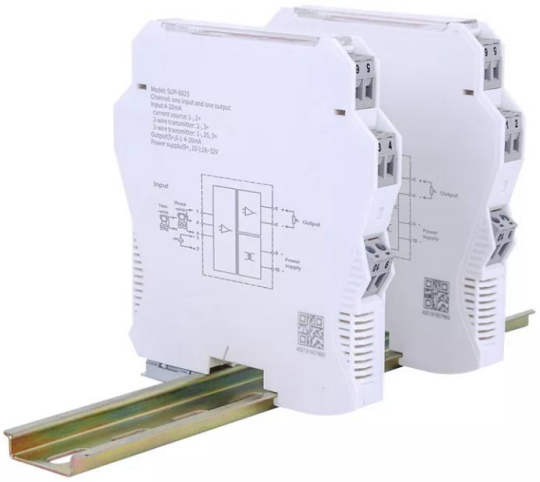
SUP-602S provides an isolated working power supply to the transmitter, and detect the current in the circuit and output current or voltage signal via isolation and transmission at the same time. The input, output and power supply terminals are isolated from each other, characterized by the advantages such as fast response, low power consumption and good temperature characteristics.
This product adopts smart design, provided with many advanced technologies such as internal digital adjustment, no potentiometer and zero-point auto-calibration. Through matching with various types of instruments and DCS, PLC and other devices, the product has been widely used in major projects in petroleum, petrochemical, manufacturing, power, metallurgy and other industries.

Applications

- Petroleum
- Petrochemical
- Manufacturing
- Power
- Metallurgy



Signal isolator

Features

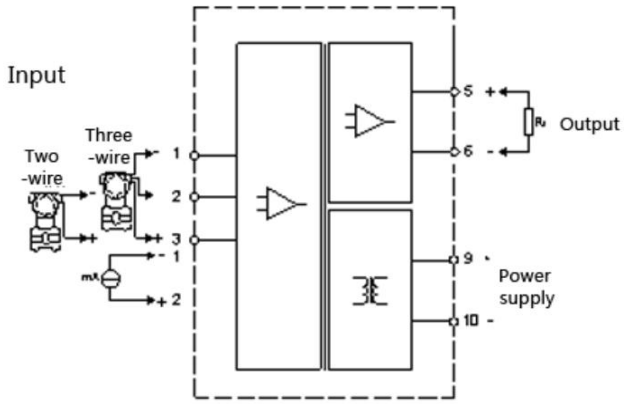
- The input, output and power supply terminals are isolated from each other.
- Fast response, low power consumption and good temperature characteristics.
- This product adopts smart design, provided with many advanced technologies such as internal digital adjustment, no potentiometer and zero-point auto-calibration.

Parameters	
Product	Signal isolator
Model	SUP-602S
Allowed input signal	DC: 0(4)mA～20mA； 0mA～10mA Other signal types may be customized as required, see the product label for details
Input impedance	about 100Ω
Allowed output signal	Current: 0(4)mA～20mA； 0mA～10mA Voltage: 0(1) V～5V； 0V～10V Other signal types may be customized as required, see the product label for the specific signal types
Output load capacity	Active: 0(4)mA～20mA：≤500Ω；0mA～10mA: ≤1kΩ Passive: RL≤【(U-3)/0.02】Ω U refers to the circuit service voltage Voltage: 0(1)V～5V：≥1MΩ； 0V～10V：≥2MΩ Other load demands may be customized as required, see the product label for details.
Output ripple	≤5mVrms（load 250Ω）
Distribution output voltage	Open circuit voltage≤26V Full-load voltage≥23V In case of full-load 20mA output, voltage≥17.5V
Accuracy of isolated transmission	±0.1%F·S（25℃±2℃）
Temperature drift	40ppm/℃
Response time	≤0.5s Dielectric strength (leakage current 1mA, with test time of 1 minute):≥1500VAC (among input/output/power supply)
Insulation resistance	≥100MΩ (among input/output/power supply)
EMC	EMC conforms to IEC61326-3
Power supply	DC 18～32V (typical value 24V DC)
Full-load power(In case of 24V DC)	Single-channel output : 0.6W Double-channel full-load output : 1.5W

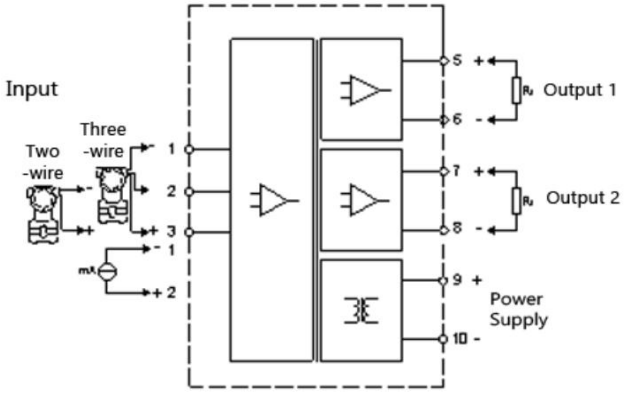
Panel indicator	
PWR	Power indicator (green). When the instrument is powered, it lights up all the time.
ALM	Input signal status indicator, red. The indicator does not light up during normal operation; The indicator flashes in case of input signal failures; The indicator lights up all the time when the input signal is out of range.

Operational Environment	
Ambient temperature during operation	−20℃～+60℃
Allowed relative humidity during operation	10%RH～90%RH（40℃）
Allowed atmospheric pressure during operation	80kPa～106kPa
Allowed ambient temperature during storage and transportation	−40℃～+80℃

Wiring

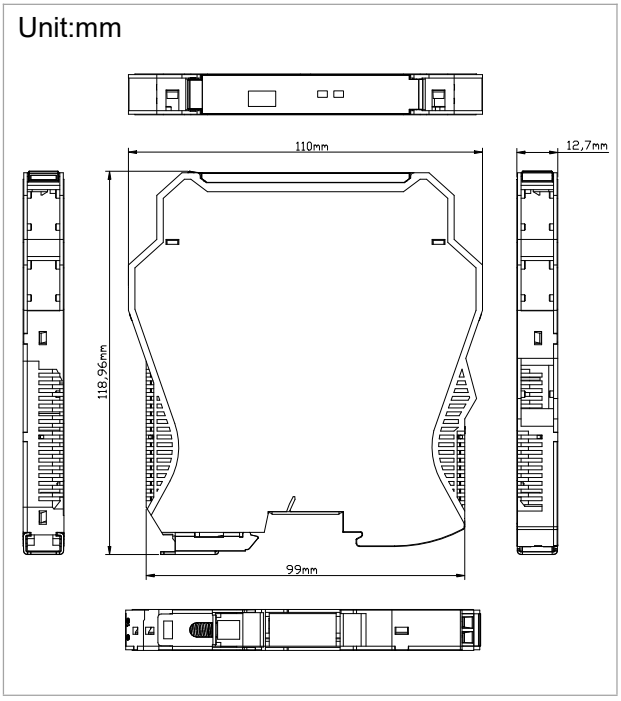


Wiring Diagram
Wiring DiaSingle-channel Input and Single-channel Output

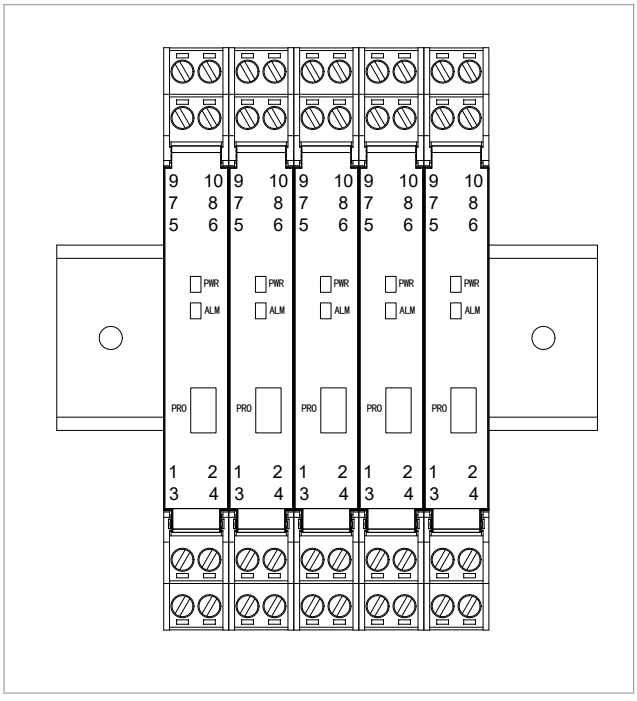


Wiring Diagram
Single-channel Input and Double-channel Output

Dimension



Width×Height×Depth(12.7mm×110mm×118.9mm)



35mm guide-rail type installation

Please position stably and firmly

Ordering code

SUP-602S-I1T1-I2T0-O1T1-O2T0-O3T0-O4T0-DO0-V1									Description
SUP-602S	-	-	-	-	-	-	-	-	Current/Voltage Isolator
Input signal 1	I1T1								(4～20) mA
	I1T2								(0～20) mA
	I1T3								(0～5) V
	I1T4								(1～5) V
	I1T5								(0～10) V
Input signal 2		I2T0							Non input signal 2 (Input signal 2 keeps consistent with input signal 1)
		I2T1							(4～20) mA
		I2T2							(0～20) mA
		I2T3							(0～5) V
		I2T4							(1～5) V
		I2T5							(0～10) V
		I2TZ							Other signal 2
Output signal 1			O1T1						(4～20) mA
			O1T2						(0～20) mA
			O1T3						(0～5) V
			O1T4						(1～5) V
			O1T5						(0～10) V
Output signal 2				O2T0					Non Output signal 2 (Input 2 only support Output 2)
				O2T1					(4～20) mA
				O2T2					(0～20) mA
				O2T3					(0～5) V
				O2T4					(1～5) V
				O2T5					(0～10) V
Output signal 3					O3T0				Non Output signal 3 (Input 2 only support Output 2)
					O3T1				(4～20) mA
					O3T2				(0～20) mA
					O3T3				(0～5) V
					O3T4				(1～5) V
					O3T5				(0～10) V
Output signal 4						O4T0			Non Output signal 4 (Input 2 only support Output 2)
						O4T1			(4～20) mA
						O4T2			(0～20) mA
						O4T3			(0～5) V
						O4T4			(1～5) V
						O4T5			(0～10) V

Distribution Output	DO0 D01		Non distribution output 24VDC (No-load voltage ≤ 26V, full-load voltage ≥ 23V, only current input can be selected)
Power supply		V1 V2	24VDC (18～32) 220VDC (85～265)

Note: Dual-channel and one-in three-out, one-in and four-out can only do 24V, do not support other power supplies