











Datasheet

Signal isolator

**SUP-602S** 



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### **Datasheet**

# Signal isolator SUP-602S

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

# Model Statistics Decrease was produced on subject to the statistics of the statisti

#### **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.

#### Signal isolator



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 $\sim$ 20mA; 0mA $\sim$ 10mA Voltage: $0(1)$ V $\sim$ 5V; 0V $\sim$ 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 $\sim$ 20mA: $\leq$ 500 $\Omega$ ; $0$ mA $\sim$ 10mA: $\leq$ 1k $\Omega$ Passive: RL $\leq$ 【 $(U-3)/0.02$ 】 $\Omega$ U refers to the circuit service voltage Voltage: $0(1)$ V $\sim$ 5V: $\geq$ 1M $\Omega$ ; $0$ V $\sim$ 10V: $\geq$ 2M $\Omega$ 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 $\sim$ 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					

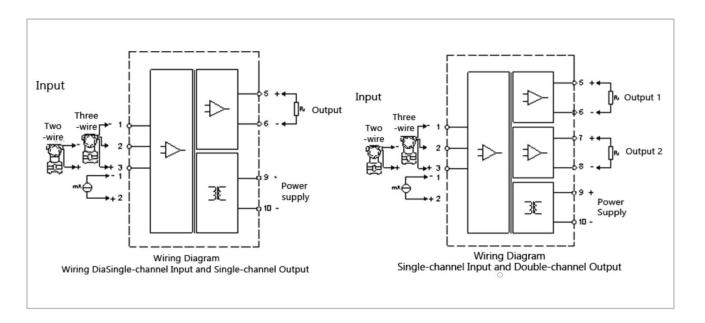
Panel indicator	
PWR	Power indicator (green). When the instrument is powered, it lights up all the time.
ALM	Input signal status indicator, red.  The indicator does not light up during normal operation; The indicator flashes in case of input signal failures; The indicator lights up all the time when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



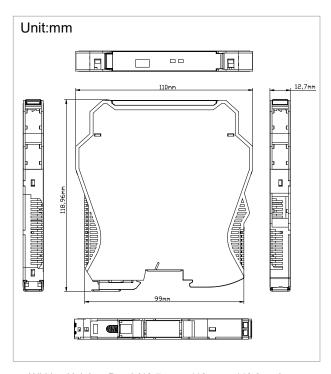
Operational Environment	
Ambient temperature during operation	<b>-20</b> ℃~+60℃
Allowed relative humidity during operation	10%RH~90%RH (40°C)
Allowed atmospheric pressure during operation	80kPa∼106kPa
Allowed ambient temperature during storage and transportation	<b>-</b> 40℃~+80℃



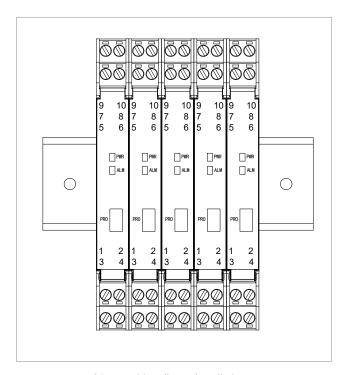
# Wiring



# **Dimension**



 $Width \times Height \times Depth (12.7mm \times 110mm \times 118.9mm)$ 



35mm guide-rail type installation Please position stably and firmly



# Ordering code

SUP-602S-0-AA-A	\1-C								Description
SUP-602S		-	-	-	-	-	-	-	Current/Voltage Isolator
	0								One Input, One Output
	2								One Input, Two Outputs
Type	4								Two Inputs, Two Outputs
	6								One Input, Three Outputs
	8								One Input, Four Outputs
	А	Α							4∼20mA
Input signal	V	'1							0∼10V
	V	2							0∼5V
	В	В							0∼20mA
	V	<b>'</b> 3							1∼5V
	X	X							Other
Output signal		A	۸1						4∼20mA Active
		V	/1						0∼10V
	V	/2						0∼5V	
	Е	31						$0{\sim}20$ mA Active	
		V	/3						1∼5V
		A	۸0						$4{\sim}20$ mA Passive
		X	ίX						Other
Power supply			С					24VDC	
			K					220VAC/DC	

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