

SHENZHEN SUNYUAN TECHNOLOGY CO., LTD.

Signal Isolated Amplifier

DIN3 Series Low Cost 4-20mA Passive Isolated Transmitter (DIN Rail-Mounted Small Size: 82x45x12.5mm)

General characteristic:

- >> Efficiency Grade:0.1/0.2
- >> Easy to use, extra power supply no needed.
- >> High precision, error and nonlinearity < 0.2%
- >> 0-10mA/0-20mA/4-20mA international standard current signal input and output
- >> Between input and output uses the passive electromagnetism i solation technology,isolation voltage can reach 3000VAC.
- >> Temperature Range:-45~85 deg.C
- >> Standard DIN Rail Mounting, super slim (12.5mm), low cost.

Applications:

- >> DC current/voltage signal isolated/transfer/amplifier
- >> Equipment and sensor signal acquisition
- >> 4-20mA signal isolation and transfer
- >> Ground-loop elimination
- >> Electric power, medical instrument isolated safe bar.
- >> No distortion in long distance signal

Specification:

SUNYUAN DIN3 series 4-20mA passive isolated transmitter, it is that makes current signal input (4-20mA/0-20mA/0-10mA) isolate, transform to proportionate current signal output (4-20mA/0-20mA/0-10mA). Product interior includs input signal interference suppression filter circuit, signal modulation circuit, signal isolating circuit and output demodulation filter circuit. The input and the output side width crawls the electricity to be away from and the internal quarantine measures enables this serial products to be possible to realize between the signal input and the signal output isolation voltage 3KVAC.

Part number and description:

Part No.: DIN3 ISO 4-20mA

This part can be used to three convertor as follows:

- 1. Input:4-20mA Output:4-20mA
- 2. Input:0-20ma Output:0-20mA
- 3. Input:0-10mA Output:0-10mA

Example:

If input is 4-20mA, output is 4-20mA, the part No. is DIN3 ISO 4-20mA

If input is 0-20mA,output is 0-20mA,the part No. also is DIN3 ISO 4-20mA

General parameter:

- >> Efficiency Grade-----0.1/0.2
- >> Isolation-----Signal Input/Output
- >> Temperature Range----25~70 deg.C
- >> Isolation voltage-----Input/Output 2500VDC 1Min. Leak current 1mA
- >> Endure voltage----3KVAC,1.2/50us (Peak Value)
- >> Operation Humidity----10~90%
- >> Storage Temperature----45~+80 deg.C
- >> Storage Humidity-----10~95%





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| lutput parameter | | |
|------------------|--------------------------------|-----------------|
| Input item | Input impedance | Input over load |
| 0-10mA | =200 ohm +RL | |
| 0-20mA | RL:Output port load resistance | 24mA |
| 4-20mA | | |

Output parameter:

| Output item | Output impedance | Output over load |
|-------------|-----------------------|------------------|
| 0-10mA | <=Rin-200 ohm | |
| 0-20mA | Rin:input signal load | 30mS |
| 4-20mA | | |

Note:Because DIN3 ISO4-20mA is passive isolation module, Itself will lose certain power in operationg, therefore in field application time, guarantee that the product normal work, input current signal load capacity needs to satisfy the following condition

Rin≥RL+200Ω

Rin:Input signal load capacity

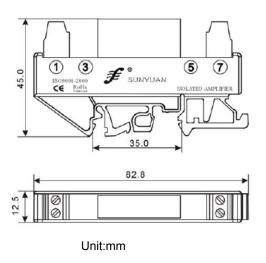
RL: Output port load resistance(Sum of the receiving end sampling resistance and circuit resistance)

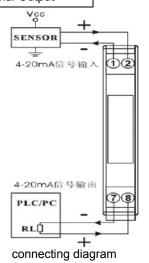
In the industry scene, generally the sampling resistance's value is 250 ohm, circuit resistance is smaller than 50 ohm,

Therefore only the input current signal load capacity is above 500Ω , you can use our DIN3 ISO the 4-20mA.But if input current signal load capacity is too low, you had better use our active (with power supply) signal isolated products. (DIN3 ISOEM series)

Footprint Description:

| PIN | Function |
|-----|-----------------|
| 1 | Signal IN- |
| 2 | Signal IN+ |
| 3 | NC |
| 4 | NC |
| 5 | NC |
| 6 | NC |
| 7 | Signal Out - |
| 8 | Signal Output + |





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