

## Passive signal isolation transmitter DIN11 IAP 4-20mA

(Current signal in, current signal out, no power supply)

### Main features:

- >>Signal input/output: 3000VDC isolated
- >>Input and output do not require external power supply
- >>International standard signal input: 0-10mA/0-20mA/4-20mA
- >>Output standard signal: 0-10mA/0-20mA/4-20mA
- >>Extremely high linearity within the full range (nonlinearity<0.2%)
- >>Has strong resistance to electromagnetic interference and high-frequency signal interference
- >>Standard DIN35 rail installation (size: 69.5x79.0x25.0mm)

### Application:

- >>Isolation, acquisition, and transformation of analog signal data
- >>Isolate 4-20mA or 0-20mA signal transmission
- >>Industrial site signal isolation and transformation
- >>Long line distortion free transmission of signals
- >>Instrumentation signal transmission and reception
- >>Power monitoring, medical equipment isolation
- >>Isolation and acquisition of frequency converter signals
- >>PLC/FA motor signal isolation control
- >>Non electric signal transmission



### Product selection table:

mode 1	input	Power supply	output
DIN11 IAP 4-20mA	4-20ma	nothing	4-20ma
DIN11 IAP 0-20mA	0-20ma	nothing	0-20ma
DIN11 IAP 0-10mA	0-10ma	nothing	0-10ma

Product maximum  
absolute rating:  
Continuous  
isolation voltage:  
3000VDC Input  
maximum voltage:  
32V

Working  
temperatur  
e:+85 °C  
Storage  
temperatur  
e:+85 °C

Output short circuit time: sustainable

Attention: If the above range is exceeded, the product may cause permanent damage.

### General parameters

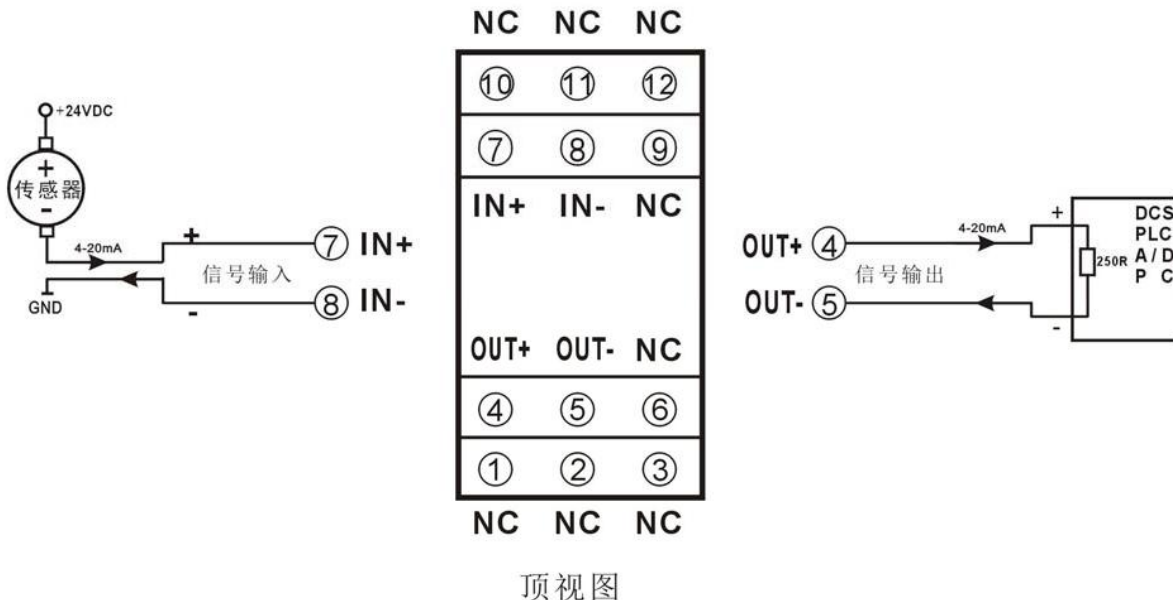
parameter	Conditions	minimum value	Typical values	Maximum value	Company
Isolation voltage	<b>1min</b>		<b>three thousand</b>		<b>VDC</b>
Insulation impedance			<b>10<sup>12</sup>  1</b>		<b>Ω Pf</b>
Leakage current	<b>240Vrms, 50Hz</b>		<b>zero point five</b>		<b>uA</b>
Warm float	<b>-45~+85°C</b>		<b>±50</b>	<b>±100</b>	<b>PPm/°C</b>
Nonlinearity	Within the full range		<b>±0.1</b>	<b>±0.2</b>	<b>%FSK</b>
Input signal voltage range		<b>eight</b>		<b>thirty-two</b>	<b>V</b>
Output linear range		<b>zero point zero three</b>	<b>four</b>	<b>twenty</b>	<b>mA</b>
Output current <b>I<sub>o</sub></b>		<b>zero point zero three</b>		<b>forty</b>	<b>mA</b>
Output voltage drop <b>V<sub>oh</sub></b>	<b>I<sub>o</sub>=20mA</b>			<b>four</b>	<b>V</b>

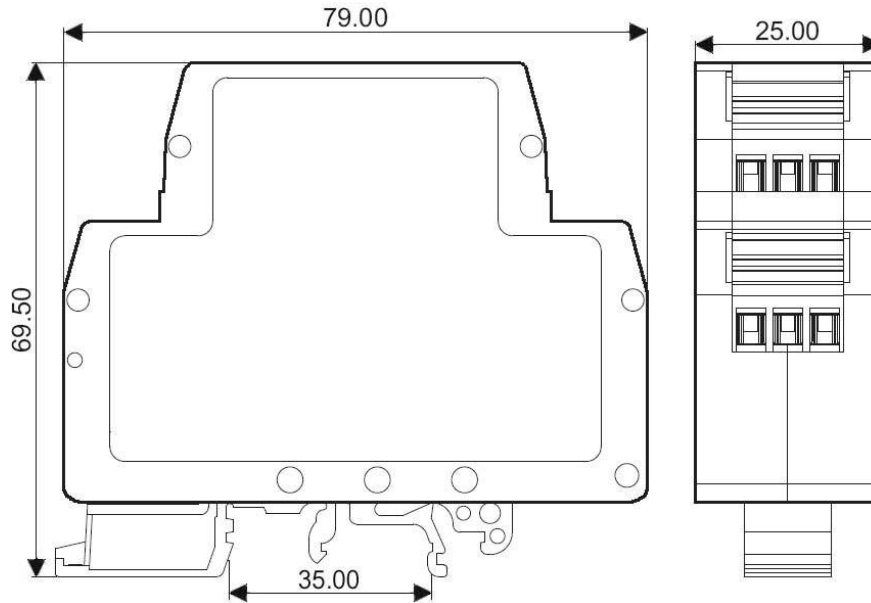
Output signal ripple			<b>five</b>		<b>mV</b>
Frequency response (signal bandwidth)		<b>I<sub>o</sub>=20mA</b>	<b>fifty</b>		<b>Hz</b>

1. Unless otherwise specified, the data in this article were measured at TA=25 °C, humidity<75%, input nominal power supply, and output rated load.
2. Non standard situations may differ from the product characteristics mentioned above. Please consult our technical personnel for specific details.

## Pin definition:

Pin	name	describe	Pin	name	describe
one	NC	Empty feet	seven	IN+	Analog signal input positive terminal
two	NC	Empty feet	eight	IN-	Analog signal input negative terminal
three	NC	Empty feet	nine	NC	Empty feet
four	OUT+	Analog signal output positive terminal	ten	NC	Empty feet
five	OUT-	Analog signal output negative terminal	eleven	NC	Empty feet
six	NC	Empty feet	twelve	NC	Empty feet





Can be installed on standard DIN35 rails

Dimensions: (Unit: mm)

### **matters needing attention:**

1. Before use, carefully check and confirm the quantity, model, and specifications of the product according to the packing list and product label.
2. When using, it is necessary to follow the wiring reference diagram corresponding to the selected product model, correctly connect the signal input, output, and power lines, check for errors, and then connect the power and signal.
3. When measuring signals directly with probes, please tighten the terminals.
4. The usage environment should be free of conductive dust and corrosive gases that can damage insulation and metals.
5. When installing centrally, the installation spacing should be  $\geq 10\text{mm}$ .
6. The product has been calibrated before leaving the factory, please do not adjust it arbitrarily. If on-site calibration is necessary, please contact our company.
7. The product is an integrated structure that cannot be disassembled, and collision and falling should be avoided. This product comes with a 2-year warranty, during which our company provides free maintenance or replacement. Any label on the product that is intentionally damaged, altered, or torn off will not be returned or exchanged.
8. There is no lightning protection circuit installed inside the product. When the input and output feeders of the product are exposed to harsh outdoor weather conditions, please take lightning protection measures.
9. Product specifications may be updated without prior notice.

### **guarantee:**

Within two years from the date of sale, if the user complies with the storage, transportation, and usage requirements and the product quality is lower than the technical specifications, it can be returned to the factory for free repair. If damage is caused due to violation of operating regulations and requirements, device fees and maintenance fees shall be paid.

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Version number: V1.2

Date: September 2012