

## IAP series Signal Channel AC Signal Transmitter

### Features:

- >> Small size, standard SIP12 package
- >> Precision grade: 0.5
- >> 0-1Vrms (50 ~ 60Hz) AC signal input
- >> International standard signal output: 0-10mA /4-20mA/0-5V/0-10V
- >> External potentiometer and other components, can be zero and gain adjustment
- >> Can be test AC voltage and current by connecting the transformer
- >> Single power supply, isolation between power supply and signal
- >> UL94V-0 standard fire retardant package
- >> Anti electromagnetic interference and high frequency interference ability
- >> Industry wide temperature (-40~+85 Deg.C)



### Product overview:

WAYJUN AC signal transmitter can convert the AC input signal into standard signal according to the proportion, 0-1Vrms input AC voltage signal; output 4-20mA DC current signal or 0-5VDC DC voltage signal. 2500VDC Isolation between the auxiliary power supply and the input/output signal, the products have been widely used in electric power, remote monitoring, instrumentation, medical equipment, industrial automation and other fields.

### Product Listing:

IAP AC - P□ - V(A)□

| Input Signal |      | Power Supply |      | Output Signal |      |           |      |
|--------------|------|--------------|------|---------------|------|-----------|------|
| AC Voltage   | Code | Power        | Code | Current       | Code | Voltage   | Code |
| 0~1Vrms      | AC   | 24VDC        | P1   | 0-20ma        | A3   | 0-5V      | V1   |
|              |      | 12VDC        | P2   | 4-20ma        | A4   | 0-10V     | V2   |
|              |      | 5VDC         | P3   | user-def.     | A8   | 1-5V      | V6   |
|              |      | 15VDC        | P4   |               |      | user-def. | V8   |

### Samples:

#### Part No.: IAP AC-P1-A4

(Input Signal:0-1VAC Power Supply:24V Output Signal:4-20mA)

#### Part No.: IAP AC-P2-V2

(Input Signal:0-1VAC Power Supply:12V Output Signal:0-10V)

#### Part No.: IAP AC-P1-V1

(Input Signal:0-1VAC Power Supply:24V Output Signal:0-5V)

### Products Absolute Maximum Ratings:

Continuous isolation voltage: 2500VDC

Power supply voltage rang:  $\pm 10\%V_{in}$

Operating temperature: +85 °C

Storage temperature: +85 °C

Lead Temperature: +300 °C(10S)

**Note:** Exceeding the maximum ratings may cause irreparable damage

**General Parameter:**

- >> Accuracy ----- 0.5
- >> Power supply ----- DC5V,12V,15V,24V(±10%)
- >> Power loss ----- if voltage output:0.2W(TYP.) ,0.5W(MAX),  
if current output:0.5W(TYP.) ,0.75W(MAX)
- >> Response time ----- ≤ 400mS
- >> Isolation ----- signal / auxiliary power supply
- >> Isolation voltage ----- 2500VDC, 1 minute, leakage current (1mA)
- >> Insulation resistance ----- ≥20MΩ
- >> Operating Temperature ----- -40 to +85℃
- >> Storage Temperature ----- -45 ~ +85℃
- >> Operating Humidity ----- 10 ~ 90% (no condensation)
- >> Storage Humidity ----- 10 ~ 95% (no condensation)

**Application Parameter:**

| Input item | Input impedance | Input over load                |
|------------|-----------------|--------------------------------|
| 0-1Vrms    | ≥500KΩ          | 2.0 times rated:<br>Continuous |

| Output item | Output over load                     | Response time |
|-------------|--------------------------------------|---------------|
| 4-20mA      | ≤350Ω (if need<br>650Ω, please note) | ≤400mS        |
| 0-20mA      |                                      |               |
| 4-12-20mA   |                                      |               |
| 0-5V        | > 2KΩ                                |               |
| 0-10V       |                                      |               |
| 1-5V        |                                      |               |

**Footprint Description:**

**1>voltage signal output**

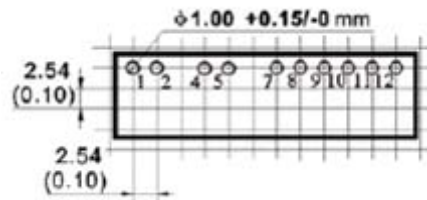
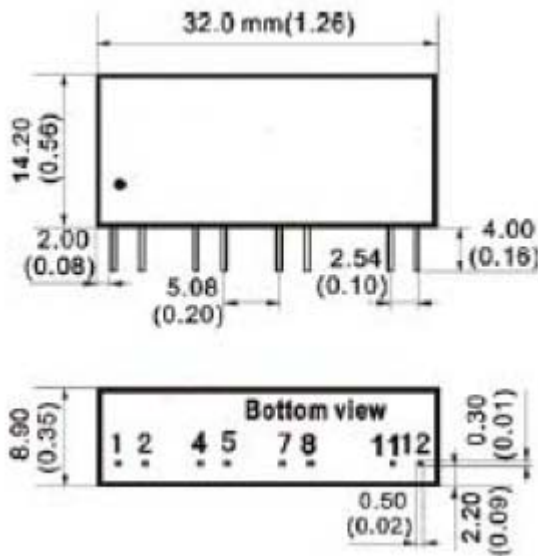
| PIN | Function              |
|-----|-----------------------|
| 1   | Signal input IN+      |
| 2   | Signal input GND      |
| 3   | NO PIN                |
| 4   | Power supply PW+      |
| 5   | Power supply PW-      |
| 6   | NO PIN                |
| 7   | NO PIN                |
| 8   | Signal output Vout-   |
| 9   | Gain adjustment G.adj |
| 10  | Gain adjustment G.adj |
| 11  | Signal output Vout+   |
| 12  | NO PIN                |

**2>current signal output**

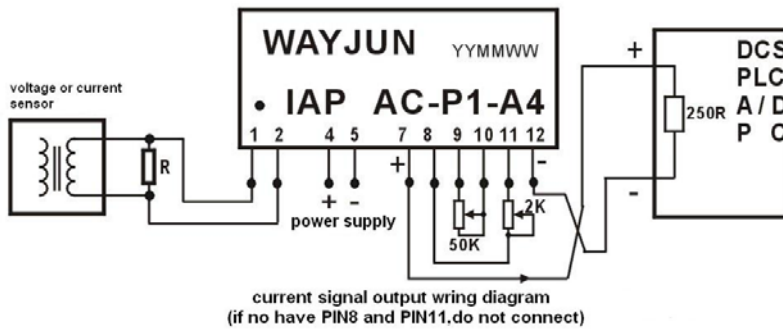
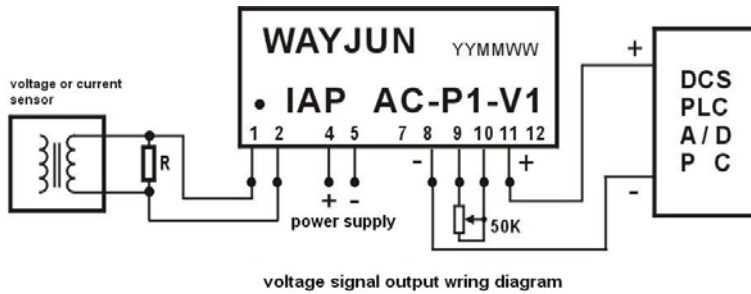
| PIN | Function              |
|-----|-----------------------|
| 1   | Signal input IN+      |
| 2   | Signal input GND      |
| 3   | NO PIN                |
| 4   | Power supply PW+      |
| 5   | Power supply PW-      |
| 6   | NO PIN                |
| 7   | Signal output Iout+   |
| 8   | ZERO or NO PIN        |
| 9   | Gain adjustment G.adj |
| 10  | Gain adjustment G.adj |
| 11  | ZERO or NO PIN        |
| 12  | Signal output Iout-   |

Mechanical Dimensions: (unit: mm)

Printed Board



Application Diagram:



**Warranty**

Two years (but violate operating rules and requirements to create damage, clients need pay maintenance costs)

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**Brand**

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