

Pressure Strain Bridge Signal Conditioners WJ15 series

Features:

- >> Industrial temperature range: - 45 ~ + 85 °C
- >> Three isolation 3000VDC: input signal/ output signal/ power supply
- >> PWR: 5VDC, 12VDC, 15VDC, 24VDC ± 10% single power supply
If >5V product has internal reverse protection.
- >> The product provides a high load capacity reference voltage of 5V or 10V to the pressure strain bridge circuit.
- >> 0-10mV / 0-20mV / 0- ± 10mV / 0- ± 20mV and other differential voltage signal input, the international standard signal 0-5V / 0-10V / 4-20mA output.
- >> Isolation voltage: 2500VDC (1mA, 60S)
- >> Installation: DIN35 rail, 79x69.5x25mm
- >> Have a strong anti-EMC electromagnetic interference and inhibit high-frequency signal space interference characteristics
- >> Using environment: the surrounding environment shall not have a lot of dust, strong vibration shock, and the corrosion of the components of the existence of gas



Applications:

- >> Load cell signal transmission
- >> Overcome the scattered acquisition, signal transmission from the long-rang circuit crosstalk, strong electrical interference
- >> Realize the free connection analog signal.
- >> Analog signal ground interference suppression
- >> Overcome the interference caused by the inverter
- >> Signal remote no distortion transmission

Product description:

WJ15 series pressure strain bridge signal processing isolated conditioners are a differential signal isolation amplification, converted into a proportional output DC signal module. Products are widely used in power, remote monitoring, instrumentation, medical equipment, industrial automation and other industries. This series modules embed a highly efficient mini power supply, they provide an isolated power supply to the input and output terminals and an optically coupled isolation amplifier, and provide a high load capacity 40mA reference output. Greatly simplifies the user's design. As a result of the internal using linear optoelectronic isolation technology compared to electromagnetic isolation has better resistance to EMC interference and space electromagnetic interference.

Product Listing:

WJ15 - Po□ - 2mV/V-P□ - V/I□

| Reference voltage | | Input signal | Power supply | | Output signal | | | |
|-------------------|------|-------------------|--------------|------|---------------|------|--------------|------|
| output | code | Sensor parameters | | code | current | code | voltage | code |
| 5V | Po1 | 1mV/V | 24VDC | P1 | 0-20ma | A3 | 0~5V | V1 |
| 10V | Po2 | 2mV/V | 12VDC | P2 | 4-20ma | A4 | 0-10V | V2 |
| User-defined | Poz | 10mV/V | 5VDC | P3 | User-defined | Az | 1-5V | V6 |
| | | User-defined | 15VDC | P4 | | | User-defined | Vz |
| | | | User-defined | Pz | | | | |

Samples:

1.signal Input: 10V 2mV/V power supply:24VDC signal output:4-20mA

Part No.: **WJ15-Po2-2mV/V-P1-A4**

2. signal Input: 5V 5mV/V power supply:5VDC signal output:4-20mA

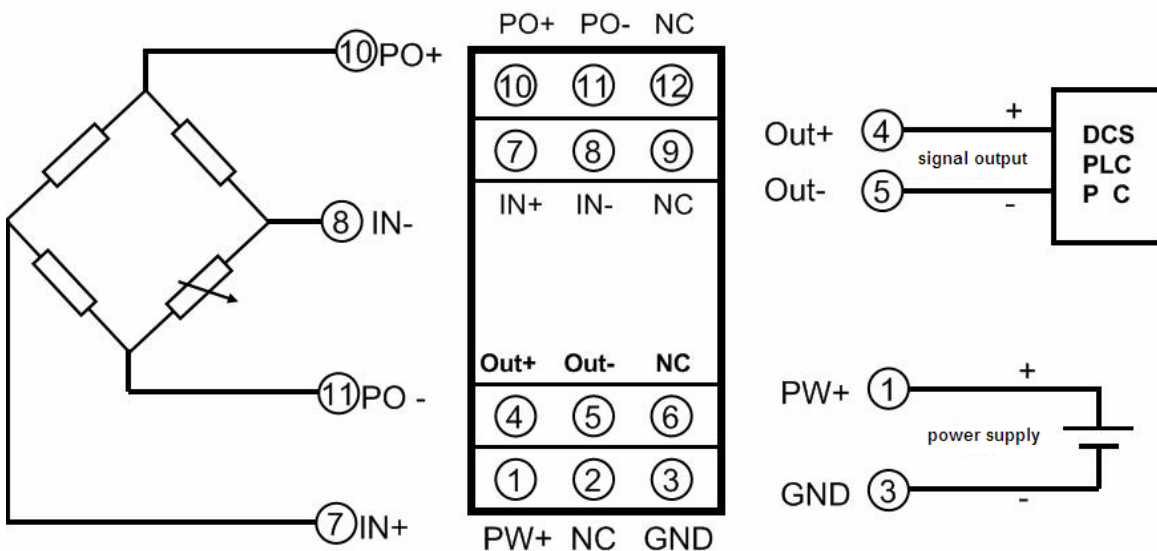
Part No.: **WJ15-Po1-5mV/V-P3-A4**

General parameters:

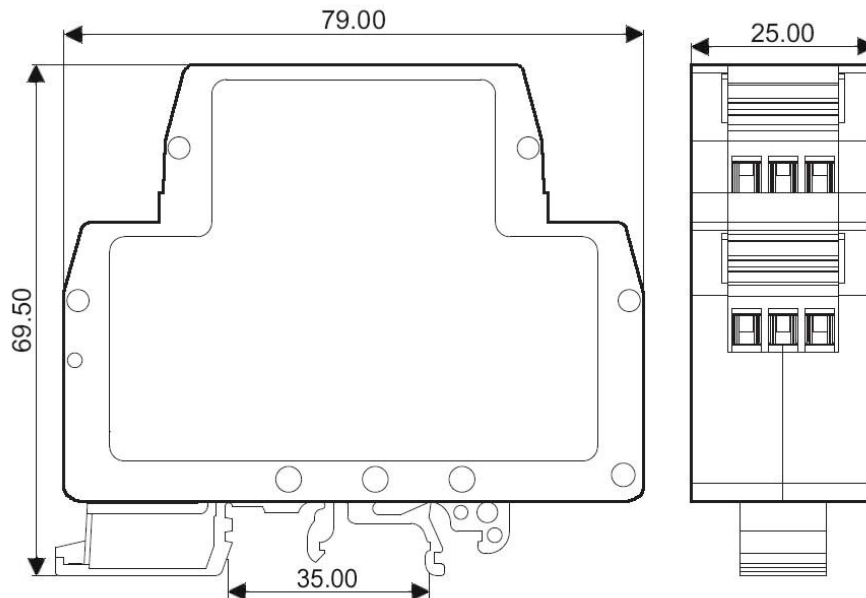
| Item | Test Condition | Min. | Type. | Max. | Unit | |
|---------------------------|----------------|--------------|-------|------|--------|-----|
| Isolation voltage | 1min | | 3000 | | VDC | |
| Gain | Voltage output | | 2 | | mV/V | |
| | Current output | | 1 | | mV /mA | |
| Gain Drift | | | 100 | | ppm/°C | |
| Non-linearity | | | 0.1 | 0.2 | %FSR | |
| Signal input | | 0 | | 1000 | mV | |
| Distribution voltage lout | | | 30 | 70 | mA | |
| Input offset voltage | | | 50 | | uV | |
| Input resistance | | 10M | | | Ω | |
| Signal output | voltage | 0 | | 15 | V | |
| | current | 0 | | 30 | mA | |
| Load capacity | voltage | Vout=10V | 1 | * | kΩ | |
| | current | | 0 | 250 | 350 | Ω |
| Frequency response | -3DB | | 100 | | mS | |
| Signal output ripple | No-filter | | 10 | 20 | mVRMS | |
| Signal voltage drift | | | | 0.2 | mV/°C | |
| Power supply | voltage | User-defined | 5 | 12 | 24 | VDC |
| | Power loss | | | 0.4 | 1 | W |
| Working temperature | | -40 | | 85 | °C | |
| Storage temperature | | -40 | | 85 | °C | |

Products Connecting Diagram:

| Pin | Function | | Pin | Function | |
|-----|----------|-----------------|-----|----------|--------------|
| 1 | Vcc | Power Supply + | 7 | A | RTD signal A |
| 2 | NC | No Pin | 8 | B | RTD signal B |
| 3 | GND | Power Supply - | 9 | B | RTD signal B |
| 4 | Out+ | Output Signal + | 10 | NC | No Pin |
| 5 | Out- | Output Signal - | 11 | NC | No Pin |
| 6 | NC | No Pin | 12 | NC | No Pin |



Size (unit: mm)

**Note:**

1. Before using, according to packing lists, and product labels, check the quantity, models and specifications
2. When measure the signal directly, please set the terminal tighten
3. There are no damaged insulation, conductive dust and corrosive fumes of metal in the environment
4. Installation pitch $\geq 10\text{mm}$
5. We have adjusted well, do not adjust arbitrarily
6. Warranty: two years. But if clients damage products by themselves or tear off any labels on the product, we can not exchange
7. Products can not been used in strong magnetic field
8. Internal no anti-lightning circuit
9. Specifications subject to change without notice

Warranty

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

Copyright

Copyright © 2010 Shenzhen WAYJUN Industrial Automation

Specifications subject to change without notice.

Brand

In this manual, mentioned other trademarks and copyright belongs to their respective owners.