

**General**

**Specifications**

Voltage Transmitter (non-isolated)

**1. GENERAL**

This signal conditioner converts DC current or voltage signals to current or voltage signals.

**2. SPECIFICATIONS**

| <b>IO Specifications</b>                   |   |
|--|---|
| Input signal                               | DC voltage or current signals   |
| Input resistance                           | 1 MΩ for voltage input, 100Ω ~ 1kΩ for current input  |
| Permissible applied voltage                | ±30V DC max   |
| Output signal                              | DC current or voltage signal  |
| Zero point adjustment range                | ±3% of span   |
| Span adjustment range                      | ±6% of span   |
| <b>Standard performance</b>                |   |
| Precision rating                           | ±0.1% of span   |
| Response speed                             | 150ms 63% response (10~90%)   |
| Insulation resistance                      | 100MΩ min (at 500V DC) between<br>input~output~power supply (DC drive)<br>input~output~power supply~ground (AC drive)                             |
| Voltage withstand                          | 500V AC/minute between input~output~power supply (DC drive)<br>1500V AC/minute between input~output~power supply~ground (AC drive)                |
| Ambient temperature and humidity           | Normal operating condition: 0~50°C, 5~90% RH<br>Operating limit: -10~60°C, 5~95% RH<br>Storage condition: -40~70°C, 5~95% RH<br>(No condensation) |
| Power supply voltage                       | 85~264V AC 47~63Hz, 24V DC±10%  |
| Effect of power supply voltage fluctuation | ±0.1% max of span per 85~264V AC or 24V DC ±10% fluctuation   |
| Effect of change in ambient temperature    | ±0.2% max of span per 10°C change in temperature  |
| Current dissipation                        | 24V DC 102mA (WH4A-1), 80mA (WH4V-1)  |
| Power dissipation                          | 100V AC 10VA (WH4A-2), 6VA (WH4V-2)   |
| <b>Mountings and dimensions</b>            |   |
| Material                                   | Case: ABS plastic   |
| Boards                                     | Both sides glass-epoxy  |
| Mounting methods                           | Rack, wall, or DIN rail   |
| Connection method                          | M4-screw terminals  |
| External dimensions                        | 72 x 48 x 127 mm (h x w x d)  |
| Weight                                     | DC drive: approx. 150g, AC drive : approx. 300g   |
| <b>Accessories</b>                         |   |
| Tag number labels: 1                       |   |
| Mounting blocks: 2                         | M4 mounting screws: 4   |

WH4  -  -  \* B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

INPUT SIGNAL

|                            |                            |
|----------------------------|----------------------------|
| A: 4~20mA DC               | 1: 0~10mV DC               |
| B: 2~10mA DC               | 2: 0~100mV DC              |
| C: 1~5mA DC                | 3: 0~1V DC                 |
| D: 0~20mA DC               | 4: 0~10V DC                |
| E: 0~16mA DC               | 5: 0~5V DC                 |
| F: 0~10mA DC               | 6: 1~5V DC                 |
| G: 0~1mA DC                | 7: -10~+10V DC             |
| H: 10~50mA DC              | 0: (custom) voltage signal |
| Z: (custom) current signal | (±300V max)                |
| (150mA max)                |                            |

OUTPUT SIGNAL

|                            |                            |
|----------------------------|----------------------------|
| WH4A                       | WH4V                       |
| A: 4~20mA DC               | 1: 0~10mV DC               |
| B: 2~10mA DC               | 2: 0~100mV DC              |
| C: 1~5mA DC                | 3: 0~1V DC                 |
| D: 0~20mA DC               | 4: 0~10V DC                |
| E: 0~16mA DC               | 5: 0~5V DC                 |
| F: 0~10mA DC               | 6: 1~5V DC                 |
| G: 0~1mA DC                | 7: -10~+10V DC             |
| Z: (custom) current signal | 0: (custom) voltage signal |
| (24mA max)                 | (±10V max)                 |

POWER SUPPLY

1: 24V DC±10% 2: 85~264V AC

DUAL OUTPUT SPECIFICATIONS

| Model | 1st Output (selectable) | 2nd Output |
|-------|-------------------------|------------|
| WH4A  | 4~20mA DC               | 1~5V DC    |
|       | 2~10mA DC               |            |
|       | 1~5mA DC                |            |
|       | 0~20mA DC               |            |
|       | 0~16mA DC               |            |
|       | 0~10mA DC               |            |
|       | 0~1mA DC                |            |
| WH4V  | 0~10mV DC               | 1~5V DC    |
|       | 0~100mV DC              |            |
|       | 0~1V DC                 |            |
|       | 0~10V DC                |            |
|       | 0~5V DC                 |            |
|       | 1~5V DC                 |            |
|       | -10~+10V DC             |            |

The JUXTA W Series allows dual output.  
Enter/DO after the model code when ordering.

High Voltage Withstand Specifications

The JUXTA W Series is also available in 2000V AC voltage withstand specifications. Contact your dealer for details.

OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

| WH4A (DC Current Output)                |                   |                             |
|---|-------------------|-----------------------------|
| Output Signal                           | Output Resistance | Permissible Load Resistance |
| 4~20mA DC                               | 5MΩ min           | 0~750Ω                      |
| 2~10mA DC                               |                   | 0~1500Ω                     |
| 1~5mA DC                                |                   | 0~3000Ω                     |
| 0~20mA DC                               |                   | 0~750Ω                      |
| 0~16mA DC                               |                   | 0~900Ω                      |
| 0~10mA DC                               |                   | 0~1500Ω                     |
| 0~1mA DC                                |                   | 0~15kΩ                      |
| Others where I <sub>100</sub> =24mA max |                   | (15/I <sub>100</sub> )Ω max |

I<sub>100</sub>: 100% output current

| WH4V (DC Voltage Output)             |                   |                             |
|--------------------------------------|-------------------|-----------------------------|
| Output Signal                        | Output Resistance | Permissible Load Resistance |
| 0~10mV DC                            | 100Ω max          | 250kΩ min                   |
| 0~100mV DC                           |                   | 2kΩ min                     |
| 0~1V DC                              | 1Ω max            | 10kΩ min                    |
| 0~10V DC                             |                   | 2kΩ min                     |
| 0~5V DC                              |                   | 2kΩ min                     |
| 1~5V DC                              |                   | 10kΩ min                    |
| -10~+10V DC                          |                   | 10kΩ min                    |
| Others where V <sub>100</sub> ≤100mV | 100Ω max          | 250kΩ min                   |
| V <sub>100</sub> =10V max            | 1Ω max            | 10kΩ min                    |

V<sub>100</sub>: 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance