

**General**

**Specifications**

PT Transmitter (R.M.S.)

**1. GENERAL**

This instrument converts AC voltage signals output from PT, etc. to current or voltage signals.  
 • AC/DC conversion is made by root mean square.

**2. SPECIFICATIONS**

| IO Specifications                          |   |
|--|---|
| Input signal                               | 0~110V AC or 0~150V AC  |
| Input loss                                 | 0.5VA max   |
| Input frequency                            | 40Hz~10kHz  |
| Permissible over-input                     | 120% (continuous), 200% (1 minute)  |
| Output signal                              | DC current or voltage signal  |
| Zero point adjustment range                | ±5% of span   |
| Span adjustment range                      | ±5% of span   |
| Standard performance                       |   |
| Precision rating                           | ±0.2% of span   |
| Response speed                             | 170ms 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                          | 2600V AC/minute between input~output, input~power supply<br>500V AC/minute between output~power supply (DC drive)<br>2600V AC/minute between input~output, input~power supply,<br>input~ground<br>1500V AC/minute between 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 90mA (WG1A-1), 60mA (WG1V-1)   |
| Power dissipation                          | 100V AC 7VA (WG1A-2), 6VA (WG1V-2)  |
| Mountings and dimensions                   |   |
| 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   |
| Accessories                                |   |
| Tag number labels: 1                       |   |
| Mounting blocks: 2                         | M4 mounting screws: 4   |

WG1  -  -  \* B

**TYPE NO.** \_\_\_\_\_

**OUTPUT SPECIFICATION** \_\_\_\_\_

A: Current  
V: Voltage

**Input signals** \_\_\_\_\_

1: 0~110V AC  
2: 0~150V AC  
0: Custom AC voltage signal  
(100% input voltage of 30~300V AC)

**OUTPUT SIGNAL** \_\_\_\_\_

|  |  |
|--|--|
| WG1A                                     | WG1V                                     |
| 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<br>(24mA max) | 0: (custom) voltage signal<br>(±10V max) |

**POWER SUPPLY** \_\_\_\_\_

1: 24V DC±10% 2: 85~264V AC

| DUAL OUTPUT SPECIFICATIONS |                         |            |
|----------------------------|-------------------------|------------|
| Model                      | 1st Output (selectable) | 2nd Output |
| WG1A                       | 4~20mA DC               | 1~5V DC    |
|                            | 2~10mA DC               |            |
|                            | 1~5mA DC                |            |
|                            | 0~20mA DC               |            |
|                            | 0~16mA DC               |            |
|                            | 0~10mA DC               |            |
|                            | 0~1mA DC                |            |
| WG1V                       | 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

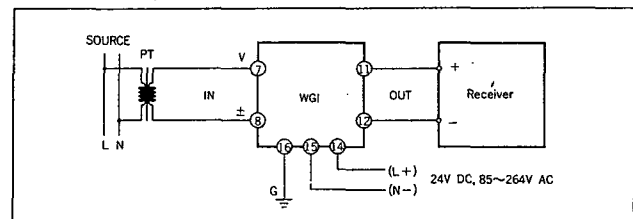
| WG1A (DC Current Output)                |                   |                             |
|---|-------------------|-----------------------------|
| Output Signal                           | Output Resistance | Permissible Load Resistance |
| 4~20mA DC                               | 5MΩ min           | 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 |                   |                             |

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

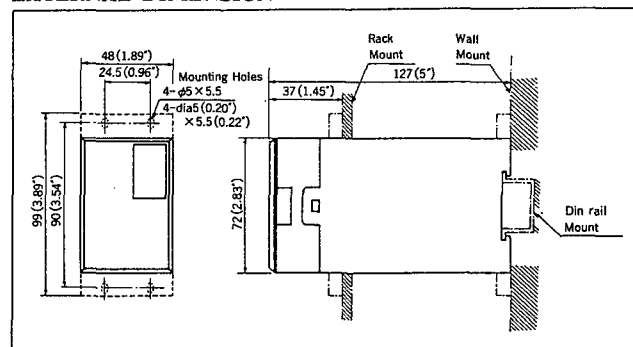
| WG1V (DC Voltage Output)               |                          |                             |
|--|--------------------------|-----------------------------|
| Output Signal                          | Output Resistance        | Permissible Load Resistance |
| 0~10mV DC                              | 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> =10V max | V <sub>100</sub> ≤ 100mV | 250kΩ min                   |
|  | V <sub>100</sub> > 100mV | 1Ω max                      |

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

#### WIRING DIAGRAM



#### EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance