

# JUXTA W Series Model : WH1A/V

## General Specifications

Isolator

JUXTA

### 1. GENERAL

This isolator converts DC current signals or voltage signals to current or voltage signals.

### 2. SPECIFICATIONS

IO Specifications	
Input signal	DC voltage or current signals
Measuring range	-10~+10V DC, span: 10mV min where zero elevation is $\pm 50\%$ max of span
Input resistance	1 M $\Omega$ for voltage input. 100 $\Omega$ ~ 1k $\Omega$ for current input
Permissible applied voltage	$\pm 30$ V DC max
Output signal	DC current or voltage signal
Zero point adjustment range	$\pm 5\%$ of span
Span adjustment range	$\pm 5\%$ of span
Standard performance	
Precision rating	$\pm 0.1\%$ of span
Response speed	150ms 63% response (10~90%)
Insulation resistance	100M $\Omega$ min (at 500V DC) between input~output~power supply (DC drive) input~output~power supply~ground (AC drive)
Voltage withstand	1500V AC/minute between input~output, input~power supply 500V AC/minute between output~power supply (DC drive) 1500V AC/minute between input~output~power supply~ground (AC drive)
Ambient temperature and humidity	Normal operating condition: 0~50°C, 5~90% RH Operating limit: -10~60°C, 5~95% RH Storage condition: -40~70°C, 5~95% RH (No condensation)
Power supply voltage	85~264V AC 47~63Hz, 24V DC $\pm 10\%$
Effect of power supply voltage fluctuation	$\pm 0.1\%$ max of span per 85~264V AC or 24V DC $\pm 10\%$ fluctuation
Effect of change in ambient temperature	$\pm 0.2\%$ max of span per 10°C change in temperature
Current dissipation	24V DC 102mA (WH1A-1), 80mA (WH1V-1)
Power dissipation	100V AC 10VA (WH1A-2), 6VA (WH1V-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

WH1□-□□-□ \*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**

- |                            |                            |
|----------------------------|----------------------------|
| WH1A                       | WH1V                       |
| 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
WH1A	4~20mA DC 2~10mA DC 1~5mA DC 0~20mA DC 0~16mA DC 0~10mA DC 0~1mA DC	1~5V DC
WH1V	0~10mV DC 0~100mV DC 0~1V DC 0~10V DC 0~5V DC 1~5V DC -10~+10V DC	1~5V 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**

WH1A (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

WH1V (DC Voltage Output)		
Output Signal	Output Resistance	Permissible Load Resistance
0~10mV DC	100Ω max	250kΩ min
0~100mV DC		250kΩ min
0~1V DC	1Ω max	2kΩ min
0~10V DC		10kΩ min
0~5V DC		2kΩ min
1~5V DC		2kΩ min
-10~+10V DC		10kΩ min
Others where V <sub>100</sub> ≤100mV		100Ω max
V <sub>100</sub> >100mV	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