

# JUXTA W Series

Model : WH3A/V

## General Specifications

Hi-Speed Isolator

JUXTA

### 1. GENERAL

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

- Conversion is performed in high speed of 15ms max with 63% response.

### 2. SPECIFICATIONS

IO Specifications	
Input signal	DC voltage or current signals
Input resistance	1 M $\Omega$ for voltage input. 100 $\Omega$ ~ 1k $\Omega$ for current input
Permissible applied voltage	$\pm$ 30V DC max
Output signal	DC current or voltage signal
Zero point adjustment range	$\pm$ 3% of span
Span adjustment range	$\pm$ 6% of span
Standard performance	
Precision rating	$\pm$ 0.1% of span
Response speed	15ms 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 (WH3A-1), 80mA (WH3V-1)
Power dissipation	100V AC 10VA (WH3A-2), 6VA (WH3V-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

WH3 - - - \* 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

- |                            |                            |
|----------------------------|----------------------------|
| WH3A                       | WH3V                       |
| 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
WH3A	4~20mA DC	1~5V DC
	2~10mA DC	
	1~5mA DC	
	0~20mA DC	
	0~16mA DC	
	0~10mA DC	
WH3V	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

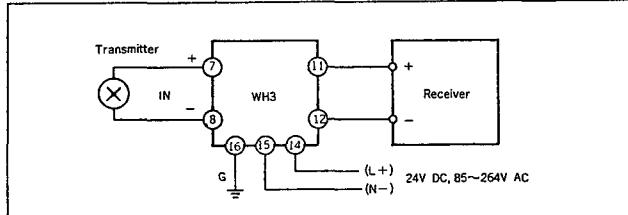
WH3A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I <sub>100</sub> =24mA max		

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

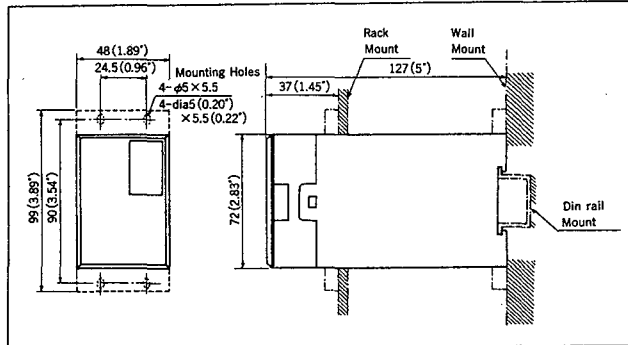
WH3V (DC Voltage Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
0~10mV DC	100Ω max	250kΩ min	
0~100mV DC		250kΩ min	
0~1V DC	1Ω max	2kΩ min	
0~10V DC		10kΩ min	
0~5V DC		2kΩ min	
1~5V DC		2kΩ min	
-10~+10V DC		10kΩ min	
Others where V <sub>100</sub> ≤100mV		100Ω max	250kΩ min
V <sub>100</sub> =10V 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