JUXTA W Series General Specifications

Model : WH9A/V

Linearizer

JUXTA

1. GENERAL

This signal conditioner converts nonlinear signals generated by analyzers and noise meters, etc. to linear current or voltage signals. The instrument will approximate 31 polygonal lines maximum.

- Incorporation of one-chip microcomputer provides high efficiency and superior performance.
- Use of Handy Terminal allows easy on-site zero and span adjustment, and I/O monitoring.

2. SPECIFICATIONS

IO Specifications	
Input signal	1~5VDC (non linear)
Input resistance	1MΩ (100kΩ when power off)
Input computation function	Polygonal line approximation
Polygonal point setting condition	-10%≦(X0~X31)≦110% -10%≦(Y0~Y31)≦110% X0<X1<...X30<X31 Y0<Y1<...Y30<Y31 X0~X31: Input polygonal point, Y0~Y31: Output polygonal point
Permissible applied voltage	±9V DC
Output signal	DC current or voltage signal
Zero point adjustment range	±1% of span
Span adjustment range	±1% of span
Standard performance	
Precision rating	±0.1% of span (when polygonal line gain is 1 max)
Response speed	200ms 63% response (10~90%)
Insulation resistance	100MΩ 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±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 85mA (WH9A-1), 50mA (WH9V-1)
Power dissipation	100V AC 9VA (WH9A-2), 5VA (WH9V-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

WH9□-□□-□*B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

INPUT SIGNAL

6: 1~5V DC

OUTPUT SIGNAL

WH9A	WH9V
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 (24mA max)	0: (custom) voltage signal (±10V max)

POWER SUPPLY

1: 24V DC±10% 2: 85~264V AC

DUAL OUTPUT SPECIFICATIONS		
Model	**1st Output (selectable)**	**2nd Output**
WH9A	4~20mA DC 2~10mA DC 1~5mA DC 0~20mA DC 0~16mA DC 0~10mA DC 0~1mA DC	1~5V DC
WH9V	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

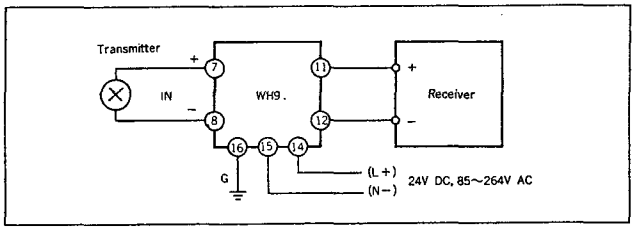
WH9A (DC Current Output)		
Output Signal	**Output Resistance**	**Permissible Load Resistance**
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~ 5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~ 1 mA DC		0~15kΩ
Others where I_{100}=24mA max		(15/I_{100})Ω max

I_{100} : 100% output current

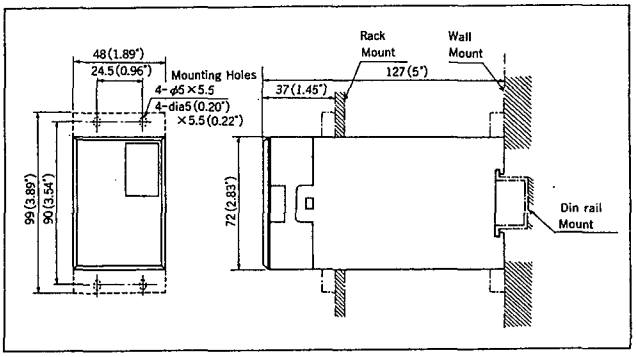
WH9V (DC Voltage Output)			
Output Signal		**Output Resistance**	**Permissible Load Resistance**
0~10mV DC		100Ω max	250kΩ min
0~100mV DC			
0~1V DC		1Ω max	2kΩ min
0~10V DC			10kΩ min
0~5V DC			2kΩ min
1~5V DC			2kΩ min
–10~+10V DC			10kΩ min
Others where V_{100}=10V max	V_{100}≦100mV	100Ω max	250kΩ min
	V_{100}>100mV	1Ω max	10kΩ min

V_{100} : 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance