

WGA-101A

Instrumentation Amplifier



Front monitor terminal

● Simultaneous output of voltage/current

Affordable, compact and lightweight instrumentation amplifiers for strain gage sensor (transducer) measurement of load, pressure, torque, or displacement. Bridge power supply, sensitivity adjustment range, calibration values, and frequency characteristics settings adjustable via internal jumper.

Specifications

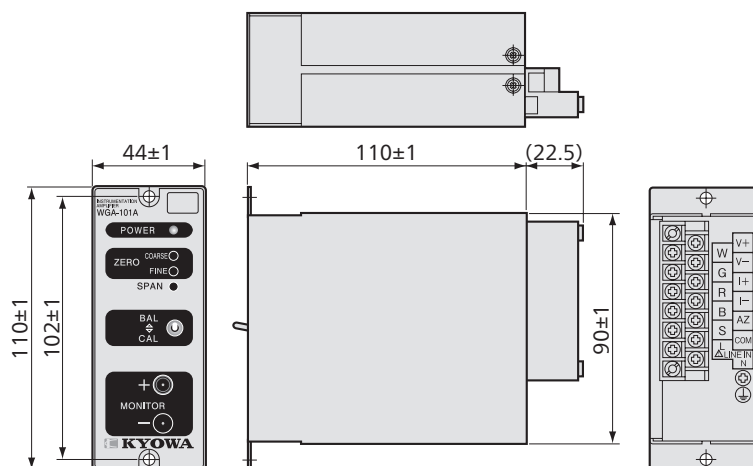
Channels	1
Applicable Transducers	Strain-gage transducers
Compatible Bridge Resistance	87.5 to 1000 Ω (Bridge excitation is limited to 5 or 2 V for transducers with bridge resistance less than 175 Ω)
Bridge Excitation	10, 5, 2 VDC (Switchable by changing internal jumper connection)
Rated Output	Dual output Voltage: ± 10 V (Load resistance 2 k Ω or more) Current: 4 to 20 mA (Load resistance 500 Ω or less) (Corresponding to voltage output of 0 to 10 V)
Zero Adjustment Range	± 1.5 mV/V, by trimmer or auto balance
Sensitivity Adjustment Range	$\times 1000$ or $\times 4000$ (Switchable by changing internal jumper connection) Adjustable between $\times 1/1$ to $\times 1/4$ by the trimmer
Calibration	0.25, 0.5 or 1.0 mV/V (Switchable by changing internal jumper connection)
Frequency Response	10, 30, 100 or 500 Hz (Switchable by changing internal jumper connection) Attenuation: -12 dB/oct.
Nonlinearity	Within $\pm 0.02\%$ FS
Stability	Zero point: Within $\pm 0.5 \mu\text{V}_{\text{RTI}}/^{\circ}\text{C}$ Sensitivity: Within $\pm 0.01\%/^{\circ}\text{C}$
Operating Temperature	-10 to 50 $^{\circ}$ C
Operating Humidity	20 to 85% (Non-condensing)
Power Supply	See table below.
Dimensions	44 W $\times$ 90 H $\times$ 110 D mm (Excluding protrusions)
Weight	650 g or less
Panel-cut Dimensions	45.0 $\times$ 93.4 mm

■ **Optional Accessories** AC power cables P-23 (For 100 VAC)
P-28 (For 200 VAC)

■ Model

Model	Power Supply	Balance Adjustment
WGA-101A-00	10 to 30 VDC, 3.5 W or less	Manual
WGA-101A-01	100 VAC, 5 VA or less	
WGA-101A-02	200 VAC, 8 VA or less	
WGA-101A-10	10 to 30 VDC, 3.5 W or less	Automatic (Also possible with external contact)
WGA-101A-11	100 VAC, 5 VA or less	
WGA-101A-12	200 VAC, 8 VA or less	

■ Dimensions



Terminal screw: M3

