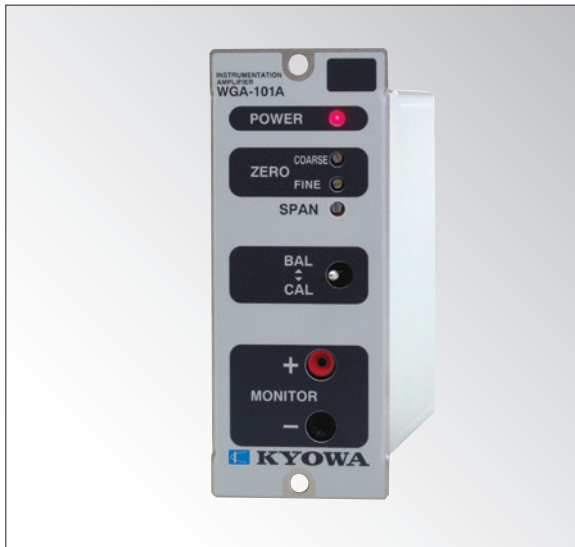


WGA-101A

Instrumentation Amplifier

- Compact
- Suitable for panel mounting

3
-104

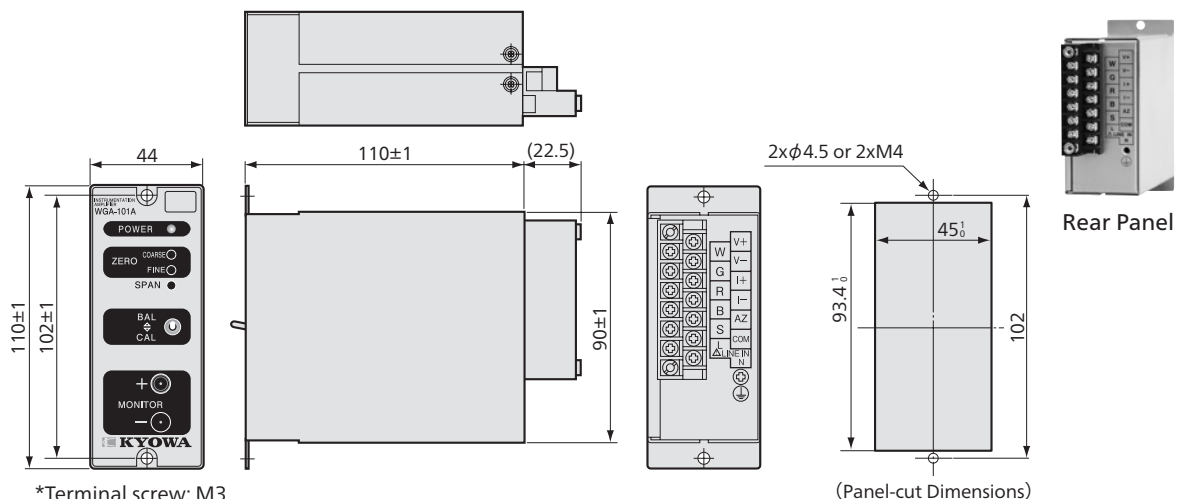


**Compact, lightweight,
moderately priced,
high performance and easy
operation**
**Simultaneous output of voltage
and current signals**

- Bridge excitation, sensitivity, calibration value and frequency response are switchable.
- Auto balance function provided (WGA-101A-10/11/12)

The WGA-101A is a compact, lightweight and moderately priced instrumentation amplifier suitable for measurement of load, pressure, torque and displacement in combination with strain-gage transducers. Available in 2 types: manual balance and auto balance, the WGA-101A is easily changed in the bridge excitation, sensitivity, calibration value and frequency response by changing jumper connection. In addition, the WGA-101A provides simultaneous output of voltage and current signals and has the monitor terminals which facilitate monitoring voltage signals even after it is incorporated into equipment.

■ Dimensions, panel-cut dimensions



Models

Models	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	

Specifications

Channels	1
Applicable Transducers	Strain-gage transducers
Applicable Bridge Resistance	87.5 Ω to 1000 Ω (Bridge excitation is limited to 5 or 2 V for transducers with bridge resistance 175 Ω or less)
Bridge Excitation	10, 5 or 2 VDC (Switchable by changing internal jumper connection)
Rated Output	Dual output Voltage: ±10 V (Load resistance 2 kΩ 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	x1000 or x4000 (Switchable by changing internal jumper connection) Adjustable between x1/1 and x1/4 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 ±0.02% FS
Stability	Zero point: ±0.5 μV _{RTI} /°C Sensitivity: ±0.01%/°C
Compliance	Directive 2014/30/EU (EMC) Directive 2011/65/EU (RoHS)
Operating Temperature	-10 to 50°C
Operating Humidity	20 to 85% (Non-condensing)
Power Supply	See table above.
Dimensions	44 W x 90 H x 110 D mm (Excluding protrusions)
Weight	650 g or less
Panel-cut Dimensions	45.0 x 93.4 mm

Standard Accessories	Instruction manual
Optional Accessories	AC power cables P-23 (For 100 VAC) P-28 (For 200 VAC)



Instrumentation Amplifiers

Outline

Amplifier

Checker

Other