

WGA-100B

Instrumentation Amplifier

- Compact
- Moderate Price



Compact, lightweight, moderate price high performance
Simultaneous output of voltage and current signals

- Bridge excitation, sensitivity, calibration value and frequency response are switchable.
- Auto balance function provided (WGA-100B-10/11/12)

The WGA-100B is a compact, lightweight and moderate price 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-100B is easily changed in the bridge excitation, sensitivity, calibration value and frequency response by changing jumper connection. Simultaneous output of voltage and current signals is possible, no need for switchover.

Models:

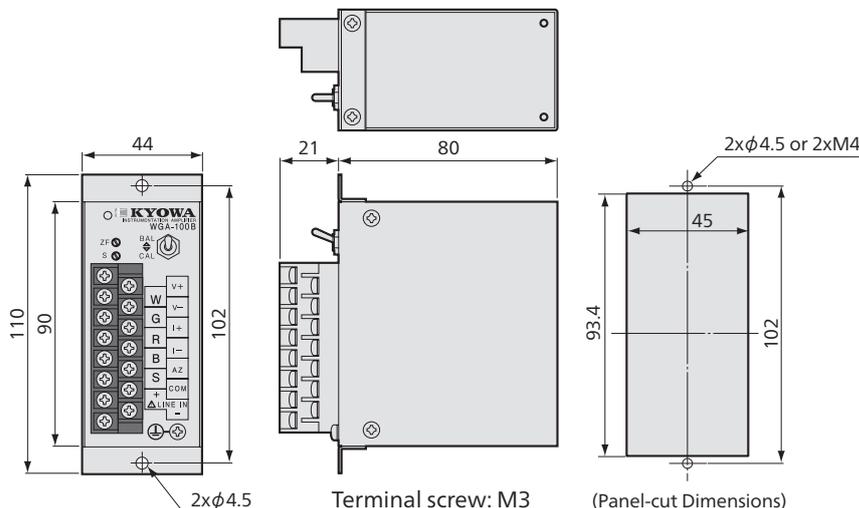
Models	Power Supply	Balance Adjustment
WGA-100B-00	10 to 30 VDC, 3.5 W or less	Manual
WGA-100B-01	100 VAC, 5 VA or less	
WGA-100B-02	200 VAC, 8 VA or less	
WGA-100B-10	10 to 30 VDC, 3.5 W or less	Automatic (also possible with external contact.)
WGA-100B-11	100 VAC, 5 VA or less	
WGA-100B-12	200 VAC,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

Specifications

Channels	1
Applicable Transducers	Strain-gage transducers
Applicable Bridge Resistance	87.5 Ω to 350 Ω (Up to 4 transducers with bridge resistance 350 Ω connected in parallel. Bridge excitation is limited to 5 V for transducers with bridge resistance 175 Ω or less)
Bridge Excitation	10 or 5 VDC, switchable by changing internal jumper connection
Full Scale 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	±0.02% FS
Zero Stability	±0.7 μV _{RIN} / °C
Sensitivity Stability	±0.01%/°C
EMC Directive	EN61326-1 (Class A)
Low Voltage Directive	EN61010-1, EN61010-2-030 (Installation Category II, Pollution Degree 2, Measurement Category O)
RoHS Directive	EN50581
Operating Temperature	-10 to 50°C
Operating Humidity	20 to 80%RH (Non-condensing)
Power Supply	See table above.
Dimensions	44 W x 90 H x 80 D mm (Excluding protrusions)
Panel-cut Dimensions	45.0 x 93.4 mm
Weight	Approx. 400 g

- Standard Accessories** Instruction manual
- Optional Accessories** AC power cables P-23 (For 100 VAC), P-28 (For 200 VAC)
DIN rail mounting fixture H-11223

■ Dimensions, panel-cut dimensions



DIN rail Mounting fixture included