# **WGA-100B**

## **Instrumentation Amplifiers**



### Compact, lightweight, low-cost high performance Simultaneous output of voltage and current signals

- Excitation voltage, 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 low-cost 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 which is also possible with external contact, the WGA-100B can easily be changed in the excitation voltage, sensitivity, calibration value and frequency response by changing jumper connection.

Simultaneous output of voltage and current signals is possible, no need for switchover.

#### Compact, Low Cost

#### Models:

Model	Power Requirements	Balance Adjustment
WGA-100B-00	10 to 30 VDC, 3.5 W or less	
WGA-100B-01	100 VAC ±10%, 5 VA or less	Manual
WGA-100B-02	200 VAC ±10%, 8 VA or less	
WGA-100B-10	10 to 30 VDC, 3.5 W or less	
WGA-100B-11	100 VAC ±10%, 5 VA or less	Automatic
WGA-100B-12	200 VAC ±10%, 8 VA or less	

#### **Specifications**

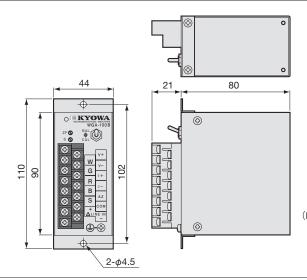
Specifications		
Number of Measu	ring Channels: 1	
Applicable Transd	ucers: Strain gage transducers	
Applicable Bridge Resistance : $87.5\Omega$ to $350\Omega$ (Up to 4 transducers		
	with bridge resistance $350\Omega$ can be	
	connected in parallel. Bridge excitation	
	voltage is limited to 5 V for transducers	
	with bridge resistance 175 $\Omega$ or less)	
Bridge Excitation :	: 10 or 5V DC, switchable by changing	
	internal jumper connection	
Rated Output :	Dual output	
	Voltage: ±10 V (load resistance 2kΩ or more)	
	Current : 4 to 20 mA (load resistance $500\Omega$ or less),	
	(corresponding to voltage output of 0 to 10 V)	
	Range: ±1.5 mV/V, by trimmer or auto balance	
Sensitivity Adjustn	nent Range :	
x1000 or x4000,	switchable by changing internal jumper connection	
	een x1/1 and x1/4 by the trimmer	
Calibration: 0.25,	0.5 or 1.0 mV/V, switchable by changing	
interna	al 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:	±0.7μV <sub>RTI</sub> /°C	
Sensitivity Stability: ±0.01%/°C		
EMC:	Conforms to IEC61326-1(class A)	
Safety Feature :	Conforms to IEC61010-1	
	(Installation categoryII pollution degree 2)	
Operating Temperature/Humidity Range : -10 to $50^{\circ}\text{C}$ , 20 to 80% RH (noncondensing temperature)		
Power Supply :	Refer to 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	

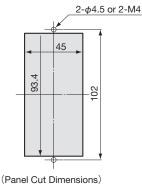
Optional Accessories AC power cables P-23 (for 100 VAC),

P-28 (for 200 VAC)

DIN rail mounting fixture H-11223

#### Dimensions Panel Cut Dimensions







DIN rail Mounting fixture included