

WGA-650B

● Equipment Incorporated

Instrumentation Amplifier

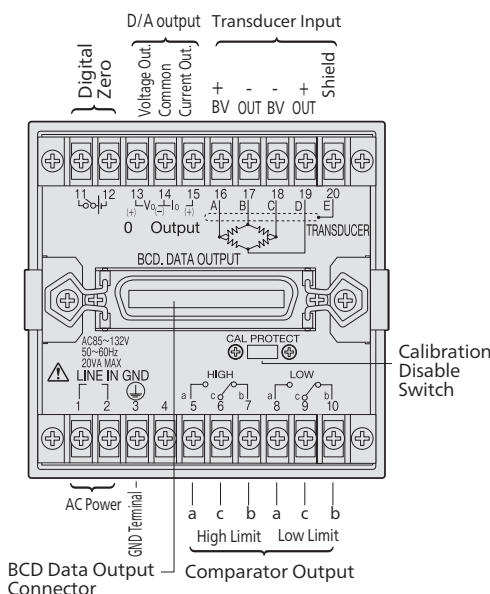


Compact Moderate Price

- Wide no-load zero adjustment range (± 2 mV/V)
- High/low limit comparators (Relay contact output)
- Indicated value is output in a voltage range of 0 to 10 V or in a current range of 4 to 20 mA.
- Indication range -1999 to 19999
- DIN size (96 x 96 mm) ensures easy installation.
- Up to 4 transducers with 350 Ω bridge resistance connected in parallel.

The WGA-650B series is compact, moderate price instrumentation amplifiers enabling direct reading of physical quantities such as loads etc. in combination with a strain-gage transducer. All operations are performed with front-panel keys including high/low limit comparator keys. While all models in this series provide D/A converted signal output, models with additional digital output (BCD) are available.

■ Rear View (WGA-650B-1)



Terminal screw: M3

Types	Models	Power Supply
Standard	WGA-650B-0 M448	85 to 132 VAC
	WGA-650B-0 M449	170 to 264 VAC
With BCD output	WGA-650B-1 M448	85 to 132 VAC
	WGA-650B-1 M449	170 to 264 VAC

Specifications

Channels	1
Applicable Transducers	Strain-gage transducers with bridge resistance of 350 Ω (Up to 4 transducers connectable in parallel)
Measuring Range	0 to 2.5 mV/V
Bridge Excitation	10 VDC/2 VDC, switchable
No-load Zero Adjustment	± 2 mV/V Analog adjustment and digital adjustment in combination
Calibration	Possible by inputting a numeric value or by applying an actual load
Display	-1999 to 19999 (Decimal point to be put anywhere.) Character height 15.24 mm, red LED
Sampling Speed	4 times/s
Nonlinearity	Within $\pm(0.03\% \text{ FS} + 1 \text{ digit})$
Zero Stability	$\pm 0.5 \mu\text{V}_{\text{RTI}} / ^\circ\text{C}$
Sensitivity Stability	$\pm 0.0025\% / ^\circ\text{C}$
High/Low Limit Comparator	Setting points: 2 (High limit, low limit) Setting range: -1999 to 19999 Contact output: Relay contact output (1 transfer circuit for each point) Contact capacity: 250 VAC, 0.5 A (Resistive load)
Analog Filters	Cutoff frequencies: 1 Hz
Smoothing	Moving averaging times: 2, 4, 8, and 16 Min. scale: 1, 2, 5, 10, 20, 50, and 100
Zero Compensation	Digital zero compensation: Possible with external voltage signals (10 to 30 VDC) Automatic zero compensation: Indication is made zero when the reading is in the setting range for 2 s or more.
Adding Functions	Setting range -1999 to 19999
Analog (D/A) output	Voltage: 0 to 10 V (Load resistance 2 k Ω or more) Desired scaling possible Current: 4 to 20 mA (Load resistance 500 Ω or less) Corresponds to voltage output of 0 to 10 V. Withstand voltage between the output and case: 500 VAC for one minute
BCD Output (WGA-650B-1)	Output mode: Isolated open collector output; output logic selectable Driving capacity: 30 VDC, 20 mA Output signals: 5-digit BCD value, minus sign, OVER, print command (EOC) Connector: 57-40360 (DDK) or the equivalent
Check Functions	Transducer check, self-check
Input Terminal Board	M3 screw board (applicable crimp-style terminals 1.25-3A and 1.25-3B or the equivalent)
Operating Temperature	-10 to 50 $^\circ\text{C}$
Operating Humidity	20 to 85%RH (Non-condensing)
Power Supply	85 to 132 or 170 to 264 VAC, 20 VA or less
Dimensions	96 W x 96 H x 139 D mm (Excluding protrusions)
Weight	Approx. 1.3 kg
Panel-cut Dimensions	92 x 92 mm
Standard Accessories	Unit seal, AC power cable P-23 for 100 VAC, Instruction Manual

Optional Accessories

- AC power cable P-28 for 200 VAC
- Input cables U-33 to U-36
U-33 (50 cm), U-34 (1 m), U-35 (2 m), U-36 (5 m)
- BCD output connector BCD-CONN (57-30360 (DDK) or the equivalent)