

INSTRUMENTATION AMPLIFIERS & TRANSDUCER INDICATORS

PART PDF ISSUE Kyowa Measuring Instruments for Stress Solutions KYOWA ELECTRONIC INSTRUMENTS CO., LTD.

WGA-650A Panel Mounted Instrumentation Amplifier

- Connects in parallel with up to four strain-gage transducers of 350Ω bridge resistance.
- Wide zero adjustment range ($\pm 2\text{mV/V}$)
- High/low limit setting available for comparison (relay contact output)
- Analog output of a reading in 0 to 10V or 4 to 20mA
- Digital indication and output (BCD) of -1999 to 19999
- DIN size front panel (96 x 96mm) for easy installation
- Measuring range: 0 to 2.5mV/V
- Bridge voltage: 10Vdc
- Sampling frequency: 4 times/sec
- Non-linearity: $\pm(0.03\%FS + 1 \text{ digit})$
- Thermal effect on zero: $\pm 0.5\mu\text{V}/\text{m}^\circ\text{C}$
- Thermal effect on sensitivity: $\pm 0.0025\%/^\circ\text{C}$
- Power requirements: 85 to 132Vac, 50/60Hz; 20V max. or 170 to 264Vac
- Dimensions and mass: 96 x 96 x 139mm, approx. 1kg



WGA-710B Instrumentation Amplifier

- Connects with strain-gage transducers.
- High noise resistance making it suitable for industrial application
- Variety of functions meet diverse applications.
- Keylock function for prevention of erroneous operation
- High/low limit setting device (one relay-contact-output transfer circuit) and peak-hold function
- Set values are stored in a non-volatile memory.
- Measuring range: $\pm 3.2\text{mV/V}$
- Display: Max. ± 9999
- Options: BCD parallel output, analog conditioner, D-A converter, EIA-232-D (RS-232-C) data output, isolated analog conditioner, 8-step comparator
- Power requirement: 100, 115, 200 or 220Vac, selectable
- Dimensions and mass: 72 x 144 x 188mm, approx. 1.7kg



WDS-100DS Weighing Checker

- Allows the user to easily inspect the load cell connected with the measuring instrument in the field. It also permits the user to check the operation of signal conditioner by sending a strain signal to it.
- Applicable transducers: Load cells of 60 to 350Ω.
- Strain output: 0 to $\pm 2000 \times 10^{-6}$ strain
- Measuring range
Resistance: 0 to 1999Ω
Strain: $\pm 1999 \times 10^{-6}$ strain (x1 range)
 $\pm 19990 \times 10^{-6}$ strain (x10 range)
- Insulation resistance check: 1 to 100MΩ
- Power requirement: 2 pieces of dry cell battery LR6
- Dimensions and mass: 182 x 92 x 25mm, approx. 600g



WGI-300 Instrumentation Amplifier

- Connects with strain-gage transducers.
- Designed to be assembled into a production line or equipment for the monitoring purpose
- Two types available—current output (4 to 20mA) and voltage output (0 to $\pm 2\text{V}$)
- Equipped with a comparator (contact output)
- Display: 3-1/2 digits
- Power requirement: Either of 100/115/200/220Vac or 12/24Vdc, selectable
- Dimensions and mass: 96 x 48 x 162mm, approx. 800g



WGA-100 Instrumentation Preamp

- Connects with strain-gage transducers.
- Small, lightweight and economically priced
- Compromise dust- and dripproof structure
- Suitable for mounting onto industrial equipment
- Rated output: 10V or 4 to 20mA, selectable
- Power requirement: 100 or 200Vac, selectable
- Dimensions and mass: 44 x 90 x 92mm, approx. 0.5kg



WDC-200 Instrumentation Amplifiers

- Connects with strain-gage transducers.
- Suitable as a preamplifier or transmitter for long-distance transmission
- Output: 0 to $\pm 5\text{V}$, 4 to 20mA
- Dimensions and mass: 66 x 136 x 220mm, approx. 1.5kg
- Variety of options including a setting panel, remote zero adjustment, remote calibration circuit and polarity inverter



WDS-150A Small-Sized Digital Indicator

- Connects with strain-gage transducers.
- Small, lightweight, pocketable design
- Applicable transducers: 60 to 1000Ω 4-gage method
- Measuring range: 10 to 19990 x 10^{-6} strain; indication of ± 1000 for $\pm 4000 \times 10^{-6}$ strain with the standard sensitivity of $\pm 2\text{mV/V}$
- Dimensions and mass: 85 x 90 x 26mm, approx. 350g

