



Instrumentation Amplifier

WGA-680A

NEW

A high-performance instrumentation amplifier for strain gage type transducers

CC-Link

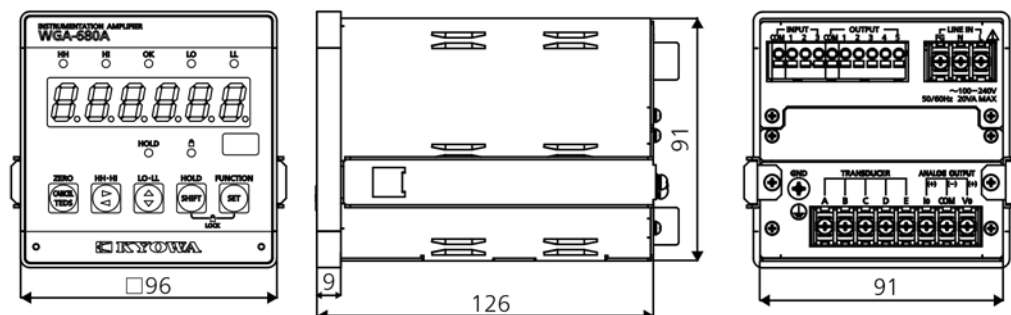
CE

- High-performance processing (Sampling rate: 4000 times/s, ADC resolution: 24 bits)
- Substantial comparison functions (Extra high, high, OK, low, and extra low)
- Analog output (A DAC is equipped)
- Various optional interfaces (CC-Link, RS-485, RS-232C, and BCD)
- Display in Red, green, or orange (To respond different situations)

Line-up

Model	Power supply	Option	Model	Power supply	Option
WGA-680A-00		None	WGA-680A-10		None
WGA-680A-01		BCD/TEDS	WGA-680A-11		BCD/TEDS
WGA-680A-02	100 to 240 VAC	RS-232C/TEDS	WGA-680A-12	10 to 30 VDC	RS-232C/TEDS
WGA-680A-03		RS-485/TEDS	WGA-680A-13		RS-485/TEDS
WGA-680A-04		CC-Link	WGA-680A-14		CC-Link

Dimensions (WGA-680A-00)



Specifications

Number of measuring channel	1	Hold function	Digital peak/bottom hold(Without analog peak/bottom hold) Type: Arbitrary point hold, peak hold, bottom hold, peak to peak hold, specified interval peak hold, specified time peak hold, specified interval bottom hold, specified time bottom hold, specified interval peak to peak hold, and specified time peak to peak hold. Delay: 0.00 to 9.99 s Detection time: 0.01 to 9.99 s											
Applicable transducer	Strain gage type transducers (full bridge)		Display	±99999 (Decimal point can be set anywhere) Display: Switchable color of red, green, orange 7-segment 14 mm high LED Update: 0.12, 0.24, 0.49, 0.98, 1.95, 3.90, 7.80, and 15.6 times/s @normal mode Display mode: Normal / hold Comparison determination: 5 points(HH, HI, OK, LO, and LL) Status display: 2 points (HOLD, LOCK)										
Applicable bridge resistance	87.5 Ω to 1 kΩ (Up to 4 unit of 350 Ω transducers can be connected in parallel)			Analog output (D/A output)	Voltage output: ±10 V(Load resistance: 2 kΩ or more) (Any scaling possible) Current output: 4 to 20 mA(Load resistance: 500 Ω or less, 4-20 mA output is in proportion to 0-10 V) Conversion rate: 4000 times/s Nonlinearity: within ±0.1%FS Setting items: display value of zero, display value of full scale									
Excitation voltage	2 or 10 VDC, selectable				Control input	Number of points: 3 Command: Zero, hold, and reset Signal format: Non-voltage contact signal, or open collector(Capacity: 12 VDC, 5 mA or more)								
Measuring range	-3.2 mV/V to 3.2 mV/V (Including zero adjustment range)					Control output	Number of points: 5 Type: HH, HI, OK, LO, and LL Output format: Open collector (Capacity: 30 VDC, 20 mA or less)							
Zero adjustment range	Within measuring range (not saved when the power shut down)						Level test function	Display of arbitrary values possible Display adding function: Disable, enable Setting range: -99999 to 99999 Level test: ON, OFF						
Nonlinearity	Within ±(0.02%FS + 1 digit)							Power Supply	100 to 240 VAC, 50/60 Hz, 20 VA or less 10 to 30 VDC, 10 W or less					
Stability	Zero point: Within ±0.25 μV _{RTI} / °C Sensitivity: Within ±0.01% / °C								Dimensions	96 W × 96 H × 126 D mm(Excluding protrusions)				
Sampling rate	4000 times/s									Panel cutout	92 × 92 mm			
ADC resolution	24 bits										Weight	Approx. 750 g (Excluding options)		
Calibration function	Actual load calibration, sensitivity registering calibration, and numeric value registering calibration											Operating conditions	Temperature range: -10 to 50 °C Humidity range: 20 to 80%RH (noncondensing)	
Smoothing function	Filter: 10, 30, 100, and 300 Hz Attenuation: -12 ±1 dB/oct. Moving average: 0, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, and 2048 times Minimum scale: 1, 2, 5, 10, 20, 50, 100, 200, 500, and 1000 counts												EMC directive	EN61326-1 (Class A)
Zero compensation	Auto zero compensation: digital zero within the setting range Approximated zero compensation: Display zero when the reading is in a preset range of 0 to 9													Low voltage directive
Adding range	-99999 to 99999	RoHS directive												
Original value display	-3.2000 mV/V to 3.2000 mV/V (5-digit) Accuracy: Within ±0.1%FS													
Comparison functions	Number of setting points: 4 Pattern: Register 4-group pattern files, switch them by setting function on the front panel Type: Extra high(HH), high(HI), OK, low(LO), extra low(LL) Setting range: -99999 to 99999 Hysteresis: 0 to 99999 Mode: Normal/hold High/Low Assignment: Any comparator can be assigned as your desired type													

Accessories

Standard accessories
Instruction manual (CD)
Unit seal
Driver(-)

Optional accessories
AC power cable P-23 for 100 VAC
AC power cable P-28 for 200 VAC
Input cables U-29 to 32, 6-conductor with an NDIS connector
Input cables U-33 to 36, 4-conductor with an NDIS connector

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Safety Precautions

Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

• Specifications are subject to change without notice for improvement.

E_H27-07d



JQA-0821
JQA-EM4824

Manufacturer's Representative