

# WGI-470AS1

## Instrumentation Amplifier

3  
-108

MEASURING INSTRUMENTS



### Compact, 48×96 mm (Front surface) High-speed sampling: 2000 times/s

- 2-analog output: Simultaneous voltage and current output, individual scaling
- Peak hold: 5 types of peak hold
- Wide power supply voltage range: 100 to 240 VAC
- 3 sensitivity registrations: actual load calibration, sensitivity registration calibration, numerical value registration calibration
- TEDS function: Automatic sensitivity registration, TEDS file automatic sensitivity registration
- Option: RS-232C, RS-485, BCD output

High-speed, compact, high functionality instrumentation amplifier that incorporates a strain-gage transducer with optimized functionality in a small case.

Capable of wide range of measurement and control tasks such as press load measurement utilizing high-speed digital peak-hold function, load measurement utilizing high resolution, etc.

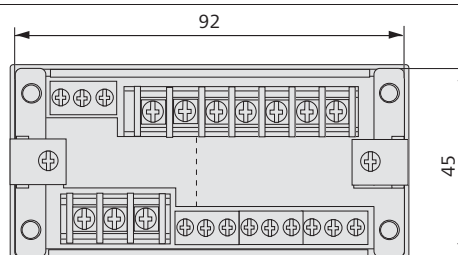
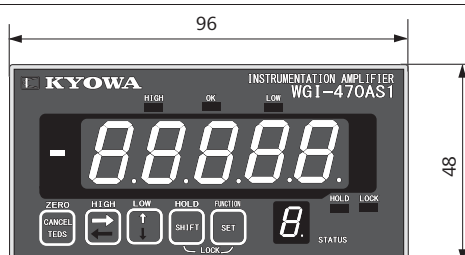
### Models

Models	Options
WGI-470AS1-00	No option
WGI-470AS1-01	BCD output
WGI-470AS1-02	RS-232C
WGI-470AS1-03	RS-485

### Specifications

<b>Channels</b>	1
<b>Applicable Transducers</b>	Strain-gage transducers
<b>Compatible Bridge Resistance</b>	87.5 to 1000 Ω (350 Ω, 4 in parallel connection)
<b>Bridge Excitation</b>	2 VDC, 10 VDC, switchable
<b>Measuring Range</b>	±3.2 mV/V (Including zero adjustment range)
<b>Zero Adjustment Range</b>	Within measuring range (Not retained when power supply interrupted)
<b>Sampling Speed</b>	2000 times/s
<b>Resolution</b>	64000 counts/input range in both polarities
<b>Calibration Functions</b>	Actual load calibration, sensitivity registration calibration, numerical value registration calibration
<b>Display Functions</b>	Main display: 5 digits (±99999), polar LED Sub display: 1 digit (9) Update speed: 0.13, 0.25, 0.51, 1.02, 2.03, 4.07, 8.16, and 16.28 s (Thinning display) Comparative determination: 3 points (HIGH, OK, LOW) Status display: 2 points (HOLD, LOCK)
<b>Nonlinearity</b>	Within ±(0.02%FS±1 digit)
<b>Stability</b>	Zero point: Within ±0.25 μV <sub>RTI</sub> /°C Sensitivity: Within ±0.01%/°C
<b>Smoothing Functions</b>	Minimum scale: 1, 2, 5, 10, 20, 50, and 100 counts Moving average: 0, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024, and 2048 times Filters: 10, 30, 100 Hz and FLAT
<b>Comparison/Judgment Functions</b>	Comparators: 2 points (HIGH, LOW) Hysteresis: Individual width settings possible Comparison mode: Normal/at hold Judgment: 1 point
<b>Pattern Functions</b>	Registers 4 groups of pattern files (comparative values) and enables switching through setting of functions.
<b>Adding Functions</b>	Settings range: ±99999
<b>Original Value Display Functions</b>	±3.20000 mV/V (6 digits) Accuracy: Within ±0.1%FS
<b>Level Test Functions</b>	Display of arbitrary values possible
<b>Hold Functions</b>	Digital peak hold Arbitrary point hold, peak hold, section definition hold, time specification hold, time specification continuous peak hold
<b>Analog Output</b>	Simultaneous dual output of voltage & current Data update: 2000/s (For simultaneous use of voltage and current, 1000/s) Voltage output: ±10 V, independent arbitrary scaling possible Current output: 4 to 20 mA, independent arbitrary scaling possible Automatic settings with rated capacity fully scaled possible (At sensitivity registration, at automatic sensitivity registration) Nonlinearity: Within ±0.1%FS
<b>TEDS</b>	Automatic sensitivity registration by reading TEDS data Automatic sensitivity registration by reading TEDS files
<b>Control Input</b>	4 points: Zero command, level test command, hold command, reset command
<b>Control Output</b>	3 points: HIGH, OK, LOW
<b>Operating Temperature</b>	-10 to 50°C
<b>Operating Humidity</b>	20 to 85%
<b>Power Supply</b>	100 to 240 VAC, 22 VA or less
<b>Dimensions</b>	96 W × 48 H × 144 D mm
<b>Panel-cut Dimensions</b>	92.2 <sup>+0.4</sup> <sub>-0.4</sub> W × 45.2 <sup>+0.4</sup> <sub>-0.4</sub> H mm Plate thickness 0.8 to 5.0 mm recommended
<b>Weight</b>	Approx. 400 g
<b>Standard Accessories</b>	Unit seal, instruction manual

### ■ Dimensions



Instrumentation  
Amplifiers

Outline

Amplifier

Checker

Other