



## 6020A RATIO/RESISTANCE BRIDGE



### Featuring

- ▶ NEW Micro-Controller for improved speed and functionality
- ▶ NEW capacitive touchscreen with enhanced design and easy-to-use operation
- ▶ Best Accuracy  $< 0.025 \mu\Omega/\Omega$
- ▶ Maximum Ratio 14:1
- ▶ IEEE488.2 Standard
- ▶ System Integration with Measurements International (MI) Matrix Scanners and High-Current Range Extenders
- ▶ NEW Zero Filter
- ▶ NEW 1 kHz Sample Rate
- ▶ NEW Selectable Settle Time & Measurement Time
- ▶ NEW MI Software Package
- ▶ Two Selectable Measurement Algorithms

Feature	Benefit
DCCT based.	Provides excellent stability and range linearity.
Fast Reversal Rates	Reversal rates as fast as 4 seconds without affecting Bridge accuracy.
Quick Measure Mode	First Measurement $< 30$ seconds
New Micro-Controller	Improved speed, functionality for the most efficient unit operation.
National and Primary Lab Continuity	Used by leading NMI's, Energy, Defence, Aeronautical and Space organizations.
Up to 10,000 Amps	Can be expanded for shunt calibrations and DCCT's.



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### Specifications: Rev 1

0.1 Ω to 10 kΩ			
Range (1:1 Ratio)	Accuracy ( $\mu\Omega/\Omega$ )	Range (1:10 Ratio)	Accuracy ( $\mu\Omega/\Omega$ )
0.1 Ω to 0.1 Ω	0.1	0.1 Ω to 1 Ω	0.1
1 Ω to 1 Ω	0.025	1 Ω to 10 Ω	0.03
10 Ω to 10 Ω	0.025	10 Ω to 100 Ω	0.03
100 Ω to 100 Ω	0.025	100 Ω to 1 kΩ	0.03
1 kΩ to 1 kΩ	0.025	1 kΩ to 10 kΩ	0.03
10 kΩ to 10 kΩ	0.1	1 kΩ to 12.9 kΩ	0.03

1. As a ratio device the accuracy specifications can be improved upon based on your standards and environmental conditions
2. Ratio bridge where the ratio accuracies can be verified at anytime using the interchange technique method for 1:1 ratio measurements with the following equation  $re=(Ra-1/Rb)/2$
3. Uncertainties follow GUM at 2 sigma level (95%) along with degrees of freedom

10 $\mu\Omega$ to 1 Ω		
Range	Accuracy ( $\mu\Omega/\Omega$ )	With Range Extender ( $\mu\Omega/\Omega$ )
10 $\mu\Omega$ to 100 $\mu\Omega$	N/A	< 0.5
100 $\mu\Omega$ to 1 mΩ	N/A	< 0.4
1 mΩ to 10 mΩ	< 5	< 0.3
10 mΩ to 100 mΩ	< 0.5	< 0.2
100 mΩ to 1 Ω	< 0.1	< 0.2

**Dimensions (L × W × H):**  
438 × 406 × 267 (mm)

**Weight:**  
19 kg

**Shipping Weight:**  
23 kg

**Mains Power:**  
100 V, 120 V, 220 V, 240 V<sub>AC</sub>, 50/60 Hz  
200 VA maximum

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