

>368,688789 12437,23-2933 977 56-203 88849<
>163,65546 67818,7-23967 911 56-203 88861<
>198,65546 65612,23-2829 955 56-203 46549<
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>145,523286 64486,22-2889 966 56-203 88849<
>868,688789 12437,23-2933 977 56-203 55549<



DATA SHEET

MODEL 6010-400



Automated Resistance System 400 Amp

- 10uA to 400 Amps
- System Accuracy to <.2 PPM
- 1mΩ to 13kΩ
- Linearity 0.01 PPM
- IEEE488
- 1,000,000:1 Ratio
- Completely “Turn-Key” System
- All Interconnecting Cables

MODEL INFORMATION

The Model 6010-400 is a completely “turn-key” system requiring no manual intervention for measurement ratios from 0.000001:1(1 μΩ to 1 Ω) up to 13:1(1Ω to 13kΩ). This resistance measurement system offers a totally automated solution to calibrating standard resistors and current shunts under full power conditions. The system determines temperature and power characteristics of the unit under test to very low uncertainties.

This system combines the newest current comparator technology, multiplexing capability, 100 Amp DC Linear

Source and an 875A DC source, for obtaining the best uncertainties commercially available. Standard 19” equipment racks, IEEE488 interface and windows operating software are included as a complete system. Comparisons of 0.000001Ω directly to a 1 Ohm standard is accomplished quickly and efficiently, while taking many data points for determining factors normally associated with high current, resistance measurements.



The system is comprised of the Model 6010 Resistance Bridge, the Model 6011 100A Range Extender, The Model 6100 100A Linear Power Supply, the Model 6013M 400A Range Extender, the 6023 400A Reversing Switch and a 30A Four Terminal Matrix Scanner, Model 4220A/30 housed in a 6 foot rack with smoked glass door.

An optional temperature measurement system, option 01, for automatically measuring the temperature of the shunt under power is also available.

Combined with the Measurements International Model 9301JW series of oil baths, alpha and beta calculations can be performed automatically on resistors under test. All data can be exported directly to Excel for various test patterns or mainframe applications. External atmospheric pressure, humidity and temperature indicators are optional and the entire system can be enclosed in a 6 ft. rack. Resistor baths (oil or air), instrument controllers, printers, system software, IEEE interface, installation and training are all available for complete system packages.

Specifications:

Ratio	Models	Accuracy	Max Current	Current Source
10:1	6010	<0.05 PPM	150 mA	Internal
1:1	6010	<0.1 PPM	150 mA	Internal
1:10	6010/6011	<0.2 PPM	1.0 A	6100A
1:100	6010/6011	<0.2 PPM	10 A	6100A
1:1,000	6010/6011	<0.2 PPM	100 A	6100A
1:10,000	6010/6011/6013M/6023	<1.0 PPM	400 A	6680
1:100,000	6010/6011/6013M/6023	<1.0 PPM	400 A	6680
1:1,000,000	6010/6011/6013M/6023	<1.0 PPM	400 A	6680
Product Details				
Operating Environment		18 to 34°C, 10 to 80% RH		
Warranty		1 Year Parts & Labor		
Dimensions (W x H x D)		1190 mm x 1850 mm x 875 mm		
Weight		160 kg		
Shipping Weight		180 kg		
Operating Power		100, 120, 220, 240V - 50/60Hz		

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