

>368,688789 12437,23-2933 977 56-203 55549<
>163,65546 67818,7-23967 911 56-203 88849<
>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 6010-2000



**Automated Shunt
Measurement System – 2000 Amp**

- 10uA to 2000 Amps
- System Accuracy to < 1.0 PPM
- 1,000,000: 1 Ratio
- Turn Key System

MODEL INFORMATION

The Model 6010-2000 is a completely “turn-key” system requiring no manual intervention for measurement ratios from 0.000001:1 (1 $\mu\Omega$ to 1 Ω) up to 13:1 (1 Ω to 13 k Ω). 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 and multiplexing capabilities with two 1000A DC sources, 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 0.000001 Ω directly to a 1 Ohm standard at 2000 amps is accomplished quickly and efficiently, while taking unlimited data points for determining factors normally associated with high current, resistance measurements. The system is comprised of the following; Model 6010 Resistance Bridge, Model 6011 100 A Range Extender,

Model 6100 100A Linear Power Supply, Model 6012M 2000A Extender, Model 6025M 2000 Amp Reversing Switch and 2 HP Model 6680-J04 Power Supplies. MI high current bus structure is housed in a magnetically shielded 5-foot rack with smoked glass door and proper ventilation.

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 2 5-ft. racks. 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	6010/6011/6012M	<1.0 PPM	2,000 A	6100/6680A(3)
1:100,000	6010/6011/6012M	<1.0 PPM	2,000 A	6100/6680A(3)
1:1,000,000	6010/6011/6012M	<1.0 PPM	2,000 A	6100/6680A(3)
Product Details				
Operating Environment		18 to 34°C, 10 to 80% RH		
Warranty		1 Year Parts & Labor		
Dimensions (W x H x D)		1190 x 185 x 875 mm		
Weight		350 kg		
Shipping Weight		400 kg		
Operating Power		100, 120, 220, 240V - 50/60Hz		

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