



Model 6010C - 100 Amp Automated Resistance System

10uA to 100 Amps

System Accuracy to <.2 PPM

1m Ω to 13k Ω

Linearity 0.01 PPM

IEEE488

Automatic Measurements to 30A

Completely "Turn-Key" System

All interconnecting cables

General Description:

The model 6010-100 is a completely "turn-key" system for measurement ratios of 1:1000 (1m Ω directly against 1 Ω) up to 13:1 (1 Ω to 13 k Ω). This resistance measurement system offers a totally automated solution for calibrating standard resistors and current shunts up to 100A. The system is capable of determining temperature and power characteristics of the unit under test to very low uncertainties.

This system combines the newest current comparator technology, multiplexing capability and a 100 Amp DC Linear 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 .001 Ohm 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 and a 30A Four Terminal Matrix Scanner, model 4220A/30 housed in a 4 or 6 foot rack with smoked glass door.

Model 6010C-100A

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 4 or 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
Operating Environment			18 to 34°C, 10 to 80% RH	
Warranty			1 Year Parts & Labor	

Dimensions:

1,220 x 490 x 46 mm

Weight:

140 kg

Shipping Weight:

160 kg

Accessories:

Option 01 (Chub-E4)
4220A/30
4220A – 1R
Controller and printer
SPSCW – XX – YY – 4

Operating Power:

100, 120, 220, 240V - 50/60Hz

Distributed By:

How to Order:

Model: 6010C - 100A
100 Amp Resistance System

Data Subject to Change

Printed in Canada



Measurements International

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