6150A AUTOMATED 150 AMP DC CURRENT SOURCE



Featuring

- Linear Technology
- Capable of Driving Inductive Loads
- Improved Settling Time
- Two Current Ranges
- ► IEEE-488 Interface

Overview

The model 6150A has been designed as a very stable DC linear supply for use with the MI Resistance and Shunt Measurement Systems (6010/6011/6012M/6013M). The model 6150A offers several improvements over the existing switched power supplied in both speed and accuracy when measuring resistive, capacitive, and inductive loads.

The 6150A offers two current ranges, 5 Amps and 150 Amps. The 5 Amp range allows the 6150A to supply precision currents below 1 ampere.

This current source utilizes transconductance amplifier technology as a voltage-to-current converter; its accuracy is dependent on precision current shunts developed by Measurements International. The power supply approaches an ideal current source for the applied load with its extremely high loop gain and high output resistance. Flat bandwidth is inherent to the design of this instrument.

The 6150A will supply precise current to any load impedance whose compliance voltage is within the output voltage limits of the power amplifier. Once the voltage compliance is exceeded, the power supply returns to standby. The compliance voltage is monitored and displayed on the front panel display. The STANDBY circuit that is operated from the front panel STANDBY/OPERATE switch may be operated remotely, however, the front panel switch can always override it. The STANDBY mode disables the output current.

A large vacuum fluorescent display is used to indicate the current and compliance voltage. The keyboard located on the front panel is used to enter data and configure the output of the 6150A. Both the compliance voltage and current can be read over the IEEE-488 interface bus.

Feature	Benefit
Linear Supply	Extremely low noise.
Excellent Stability	Will not degrade or oscillate during measurement.
Wide Range	Current is stable down below 1 A.
MI Continuity	Compatible with MI measurement systems.
Proven Reliability	Has been in use for over 25 years.

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Specifications: Rev 2

Ranges	0 to 5 Amps DC, 5 to 150 Amps DC
Stability	± 100 ppm of Range + 1-bit for 8 hours
Accuracy	± 1.0 %
Voltage Compliance	4.2 V
Resolution	16-bit
Noise	< 1.5 mA + 0.04 % of Output
DC Offset	< 5 mA
Operating Environment	18 °C to 34 °C, 10 % to 80 % RH
Warranty	1 Years Parts and Labour

How to Order

Model: 6150A

Automated 150 Amp DC Current Source

Accessories

Note: It is recommended that each supply is supplied from its own 20 A cicuit.

 Dimensions (L × W × H):
 Weight:
 Shipping Weight:

 545 x 435 x 221 (mm)
 29 kg
 35 kg

Mains Power:

100, 120, 220, 240 V_{ac}, 50/60 Hz

Corporate Headquarters

Measurements International PO Box 2359, 118 Commerce Drive Prescott, Ontario, Canada K0E 1T0

Phone: 613-925-5934 Fax: 613-925-1195 Email: sales@mintl.com Toll Free: 1-800-324-4988

