

Table 1-1. Specifications

INPUT:

115Vac \pm 10% 48-63Hz.

OUTPUT:

0-320 Volts @ 0.1 Amp.

LOAD REGULATION:

Constant Voltage - Less than 0.02% plus 2mV for a full load to no load change in output current.

Constant Current - Less than 200 μ A for a zero to maximum change in output voltage.

LINE REGULATION:

Constant Voltage - Less than 0.02% plus 2mV for any line voltage change within the input rating.

Constant Current - Less than 200 μ A for any line voltage change within the input rating.

RIPPLE AND NOISE:

Constant Voltage - Less than 1mVrms/40mV p-p.

Constant Current - Less than 200 μ Arms.

OPERATING TEMPERATURE RANGES:

Operating: 0 to 50°C. Storage: -40 to +75°C.

TEMPERATURE COEFFICIENT:

Constant Voltage - Less than 0.02% plus 1mV per degree Centigrade.

Constant Current - Less than 0.02% plus 150 μ A per degree Centigrade.

STABILITY:

Constant Voltage - Less than 0.10% plus 5mV total drift for 8 hours after an initial warmup time of 30 minutes at constant ambient, constant line voltage, and constant load.

Constant Current - Less than 0.10% plus 750 μ A total drift for 8 hours after an initial warmup time of 30 minutes at constant ambient, constant line voltage, and constant load.

INTERNAL IMPEDANCE AS A CONSTANT VOLTAGE SOURCE:

Less than 0.02 ohm from dc to 1kHz.

Less than 0.5 ohm from 1kHz to 100kHz.

Less than 3.0 ohms from 100kHz to 1MHz.

TRANSIENT RECOVERY TIME:

Less than 50 μ sec for output recovery to within 10mV following a full load current change in the output.

OVERLOAD PROTECTION:

A continuously acting constant current circuit protects the power supply for all overloads in-

cluding a direct short placed across the terminals in constant voltage operation. The constant voltage circuit limits the output voltage in the constant current mode of operation.

METER:

The front panel meter can be used as either a 0-400 or 0-40 Volt voltmeter or as a 0-0.12 or 0.012 Amp ammeter.

OUTPUT CONTROLS:

Ten-turn voltage control and course and fine current controls.

OUTPUT TERMINALS:

Three "five-way" output posts are provided on the front panel and an output terminal strip is located on the rear of the chassis. All power supply output terminals are isolated from the chassis and either the positive or negative terminal may be connected to the chassis through a separate ground terminal located on the output terminal strip.

ERROR SENSING:

Error sensing is normally accomplished at the front terminals if the load is attached to the front or at the rear terminals if the load is attached to the rear terminals. Also, provision is included on the rear terminal strip for remote sensing.

REMOTE RESISTANCE PROGRAMMING:

Constant Voltage - 300 Ω /V. Accuracy: 1%.

Constant Current - 150K Ω /A. Accuracy: 10%.

REMOTE VOLTAGE PROGRAMMING:

Constant Voltage - 1V/V. Accuracy: 1%.

Constant Current - 1.5V/.1A. Accuracy: 10%.

COOLING:

Convection cooling is employed. The supply has no moving parts.

SIZE:

3 $\frac{1}{2}$ " H x 12-5/8" D x 8 $\frac{1}{2}$ " W. Two of the units can be mounted side by side in a standard 19" relay rack.

WEIGHT: 13 lbs. net. 18 lbs. shipping.

FINISH:

Light gray front panel with dark gray case.

POWER CORD:

A three-wire, five-foot power cord is provided with each unit.