OPTION NO.	DESCRIPTION
100	Input Power: 87-106Vac, 47-63Hz single-phase.
220	Input Power: 191-233Vac, 47-63Hz, single-phase.
240	Input Power: 208-250Vac, 47-63Hz, single-phase.
910	One additional operating and service manual shipped with the power supply.

1-13 Before the supply is shipped from the factory, an internal line voltage selector switch is set and the proper fuse installed for the line voltage specified on the order. A label on the rear heatsink identifies this line voltage option.

CAUTION

Before applying power to the supply, make certain that its line voltage selector switch (S3) is set for the line voltage to be used. (See CAUTION notice in paragraph 3-2 for additional information.)

The user can convert an instrument from one line voltage option to another by following the instructions in paragraph 3-4.

1-14 ACCESSORIES

1-15 The accessories listed below may be ordered from your local Hewlett-Packard field sales office either with the power supply or separately. (Refer to the list at the rear of the manual for addresses.)

HP PART NO.	DESCRIPTION
14513A	Rack Mounting Kit for mounting one 3 1/2" high supply in a standard 19" relay rack.
14523A	Rack Mounting Kit for mounting two 3 1/2" high supplies side by side in a standard 19" relay rack.

Table 1-1. Specifications, Model 6236B and 6237B

NOTE

Specifications apply to both models unless otherwise indicated.

INPUT POWER:
Standard: 104-127Vac (120Vac nominal), 47-63Hz, single-phase, 112W, 140VA (Other line voltage options are listed in paragraph 1-12).

DC OUTPUT AND OVERLOAD PROTECTION:
0 to ±20V Outputs: Maximum rated output current is 0.5A. Short circuit output current is 0.55A ±5% and a fixed current limit circuit limits the output of each supply to this maximum at any output voltage setting. Unbalanced loads within current rating are permitted. (Switching to the variable tracking ratio mode allows the −20V output to be varied from less than −0.5V to within ±10% of the voltage setting of the +20V output.)

Model 6236B
0 to +6V Output: Maximum rated output current is 2.5A at 6V. The maximum available output current decreases with the output voltage setting. A current foldback circuit limits the output to 2.75A ±5% at 6 volts and, with decreasing voltage, reduces the current limit linearly to 1A ±15% at zero volts (short circuited).

Model 6237B
0 to +18V Output: Maximum rated output current is 1.0A. Short circuit output current is 1.1A ±5% and a fixed current limit circuit limits the output to this maximum at any output voltage setting.

TRACKING ACCURACY:
The +20V and −20V outputs track within 1% with the TRACKING RATIO control in the FIXED position.

LOAD EFFECT (Load Regulation):
All Outputs: Less than 0.01% plus 2mV for a full load to no load change in output current.

SOURCE EFFECT (Line Regulation):
All Outputs: Less than 0.01% plus 2mV for any line voltage change within rating.

PARD (Ripple and Noise):
All Outputs: Less than 0.35mV rms and 1.5mV p-p (20 Hz to 20 MHz).

DRIFT (Stability):
All Outputs: Less than 0.1% plus 5mV (dc to 20Hz) during 8 hours at constant line, load, and ambient after an initial warm-up time of 30 minutes.

1-16 INSTRUMENT AND MANUAL IDENTIFICATION

1-17 Hewlett-Packard power supplies are identified by a two part serial number. The first part is the serial number prefix, a number-letter combination that denotes the date of a significant design change and the country of manufacture. The first two digits indicate the year (10 = 1970, 11 = 1971, etc.) the second two digits indicate the week, and the letter "A" designates the U.S.A. as the country of manufacture. The second part is the power supply serial number. A different sequential number is assigned to each power supply, starting with 00101.

1-18 If the serial number on your instrument does not agree with those on the title page of the manual, Change Sheets supplied with the manual or Manual Backdating Changes define the difference between your instrument and the instrument described by this manual.

1-19 ORDERING ADDITIONAL MANUALS

1-20 One manual is shipped with each power supply unless Option 910 is ordered for each extra manual. Additional manuals may be purchased from your local Hewlett-Packard field office (see the list at the rear of this manual for addresses). Specify the model number, serial number prefix, and the HP Part Number provided on the title page.

Table 1-1. Specifications, Models 6236B and 6237B (Continued)

LOAD EFFECT TRANSIENT RECOVERY TIME:
All Outputs: Less than 50μsec for output recovery to within 15mV of nominal output voltage following a load change from full load to half load (or vice versa).

OUTPUT VOLTAGE OVERSHOOT:
All Outputs: During turn-on or turn-off of ac power, output plus overshoot will not exceed 1V if the output control is set for less than 1V. If the control is set for 1V or higher, there is no overshoot.

TEMPERATURE COEFFICIENT:
All Outputs: Less than 0.02% plus 1mV voltage change per degree Celsius over the operating range from 0 to 40°C after 30 minutes warm-up.

*OUTPUT IMPEDANCE (typical):
0 to +20V Output: 0.5mΩ plus 1.5μH
0 to −20V Output: 0.5mΩ plus 1.5μH

Model 6236B
0 to +6V Output: 0.3mΩ plus 1μH

Model 6237B
0 to +18V Output: 0.3Ω plus 1.5μH

* Operating characteristics listed as typical are provided for the user's information only and are not warranteed specifications.

METER ACCURACY:
±4% of full scale

RESOLUTION:
(Minimum output voltage change obtainable using front panel voltage control)
0 to ±20V Outputs: 70mV
Model 6236B
0 to +6V Output: 20mV

Model 6237B
0 to +18V Output: 70mV

TEMPERATURE RATINGS:
Operating: 0 to +40°C ambient. At higher temperatures, output current is derated linearly to 50% at 55°C maximum temperature.

Storage: −40°C to +75°C.

METER RANGES:
0 to +20V Output: 0-25V, 0-0.6A
0 to −20V Output: 0-25V, 0-0.6A

Model 6236B
0 to +6V Output: 0-7V, 0-3A

Model 6237B
0 to +18V Output: 0-21V, 0-1.2A

DIMENSIONS:
3.47 in. H x 8.22 in. W x 12.56 in. D
(88mm H x 209mm W x 319mm D)

WEIGHT:
9.5 lb (4.3kg)