

# POWER SUPPLIES

## General Purpose, 900- to 2,000-W Output

### HP 6260B, 6268B, 6269B, 6274B

221

- Overvoltage protection
- Constant-voltage/constant-current operation
- Analog programmable
- Remote sensing
- Auto-series, auto-parallel, and auto-tracking operation
- $\leq 50\text{-}\mu\text{s}$  load transient recovery

HP 6260B, 6268B, and 6269B

### HP 6260B, 6268B, 6269B, 6274B Power Supplies

This series of constant-voltage/constant-current power supplies employ a transistor series-regulator, triac-preregulator circuit to achieve high efficiency, excellent regulation, low ripple and noise, and moderate programming speeds in a compact, full-rack-width package.

Separate coarse and fine voltage and current controls vary output from zero to the maximum rated value. Crossover from constant voltage to constant current operation occurs automatically when the load current exceeds the value established by the current control settings.

Additional features include built-in overvoltage crowbar protection; remote sensing; and auto-series, auto-parallel, and auto-tracking operation. The crowbar trip point adjustment and associated overvoltage indicator are located conveniently on the front panel.

### Specifications (at 0° to 55° C unless otherwise specified)

	HP 6260B	HP 6268B	HP 6269B	HP 6274B
<b>DC output</b>				
Volts	0 to 10 V	0 to 40 V	0 to 40 V	0 to 60 V
Amperes	0 to 100 A	0 to 30 A	0 to 50 A	0 to 15 A
<b>Load regulation</b>				
Voltage	0.01% + 200 $\mu\text{V}$	0.01% + 200 $\mu\text{V}$	0.01% + 200 $\mu\text{V}$	0.01% + 200 $\mu\text{V}$
Current	0.02% + 2 mA	0.02% + 2 mA	0.02% + 2 mA	0.02% + 500 $\mu\text{A}$
<b>Line regulation</b>				
Voltage	0.01% + 200 $\mu\text{V}$	0.01% + 200 $\mu\text{V}$	0.01% + 200 $\mu\text{V}$	0.01% + 200 $\mu\text{V}$
Current	0.02% + 2 mA	0.02% + 2 mA	0.02% + 2 mA	0.02% + 500 $\mu\text{A}$
<b>Ripple and noise</b>				
Voltage				
rms	500 $\mu\text{V}$	1 mV	1 mV	200 $\mu\text{V}$
p-p	5 mV	5 mV	5 mV	20 mV
Current				
rms	50 mA	20 mA	25 mA	5 mA

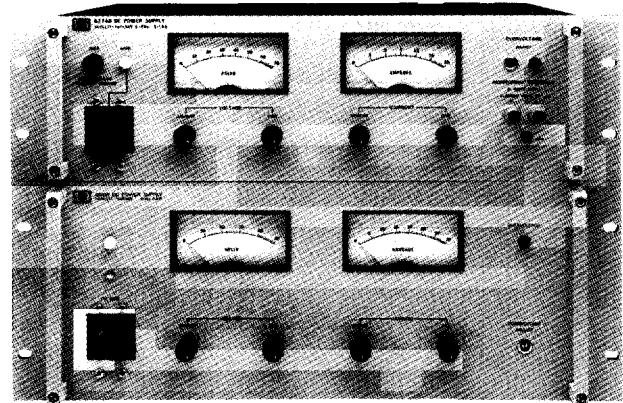
**Load-Effect Transient Recovery:** Time, 50  $\mu\text{s}$ ; level, 10 mV  
**Resolution:** Voltage control, less than 0.02%; current control, less than 0.15%

### Supplemental Characteristics

<b>Drift (stability)</b>				
Voltage	0.03% + 2 mV	0.03% + 2 mV	0.03% + 2 mV	0.03% + 2 mV
Current	0.03% + 20 mA	0.03% + 5 mA	0.03% + 10 mA	0.03% + 5 mA
<b>Resistance coefficient</b>				
Voltage	200 $\Omega/\text{V} \pm 1\%$	200 $\Omega/\text{V} \pm 1\%$	200 $\Omega/\text{V} \pm 1\%$	300 $\Omega/\text{V} \pm 1\%$
Current	2 $\Omega/\text{A} \pm 10\%$	6 $\Omega/\text{A} \pm 10\%$	4 $\Omega/\text{A} \pm 10\%$	67 $\Omega/\text{A} \pm 10\%$
<b>Voltage coefficient</b>				
Voltage	1 V/V $\pm 1\%$	1 V/V $\pm 1\%$	1 V/V $\pm 1\%$	1 V/V $\pm 1\%$
Current	5 mV/A $\pm 10\%$	16.7 mV/A $\pm 10\%$	10 mV/A $\pm 10\%$	33.3 mV/A $\pm 10\%$
<b>Speed, up*</b>				
No load	70 ms	300 ms	350 ms	600 ms
Full load	70 ms	300 ms	350 ms	600 ms
<b>Speed, down**</b>				
No load	200 ms	1 s	1 s	40 s
Full load	75 ms	650 ms	600 ms	800 ms
<b>Overvoltage</b>				
Range	2 to 12 V	4 to 45 V	4 to 45 V	6 to 66 V
Margin	5% + 2 V	5% + 1 V	5% + 1 V	5% + 1 V
<b>Weight</b>				
Net	43.9 kg (97 lb)	34.4 kg (76 lb)	40.3 kg (89 lb)	21.7 kg (48 lb)
Shipping	48 kg (106 lb)	38.1 kg (84 lb)	44 kg (98 lb)	24.5 kg (54 lb)
<b>Options</b>	005, 010, 016, 022, 027, 040	005, 010, 022, 026, 027, 040	005, 010, 022, 027, 040	005, 010, 022, 027, 028, 040
<b>Price</b>	\$3,875	\$3,775	\$3,980	\$3,060

\* Up: Increasing output voltage  
 \*\* Down: Decreasing output voltage

HP 6274B



Auto-series, auto-parallel, and auto-tracking connections should be limited to three supplies. If an application requires more than three supplies in any of the three connections, consult your local HP field engineer for additional information.

All dc output, ac input, sensing, control, and programming connections are made to rear-panel terminals. Models in this series employ cooling fans. They also have terminal blocks for ac input and are shipped without line cords.

**Temperature Coefficient per °C:** 0.01% of output plus 200  $\mu\text{V}$   
**Temperature Ratings:** Operating, 0° to 55° C; storage, -40° to 75° C  
**DC Floating Voltage:** The positive or negative output terminal can be grounded. Supplies can be floated at up to 120 V above ground.  
**Remote-Control Programming:** These power supplies can be programmed in constant-voltage and constant-current operation by using an external resistance or dc voltage with coefficients as shown in the following table. Rear terminal wiring configurations for remote-control operation are specified in the operating and service manual supplied with the power supply. For remote-control programming procedures and timing considerations, contact your local HP field engineer.

**Power:** Input voltage tolerance is  $\pm 10\%$ , 57 to 63 Hz. For other input voltage and frequency options, see the Options list below. Standard input voltage, maximum input current, and maximum power are:

HP 6260B 230 Vac, 12 A, 1,600 W  
 HP 6268B 230 Vac, 12 A, 1,600 W  
 HP 6269B 230 Vac, 18 A, 2,500 W  
 HP 6274B 115 Vac, 15 A, 1,200 W

A three-terminal barrier strip is provided for ac power connections.

**Regulatory Compliance:** Conforms to IEC 348; carries the CE mark; HP 6274B listed to UL 1244

**RFI Suppression:** Complies with CISPR-11 Group 1 Class B

### Size:

HP 6260B, 6268B, and 6269B: 483 mm W  $\times$  173 mm H  $\times$  479.4 mm D (19 in  $\times$  6.812 in  $\times$  18.875 in)  
 HP 6274B: 483 mm W  $\times$  127 mm H  $\times$  479.4 mm D (19 in  $\times$  5.00 in  $\times$  18.875 in)

### Key Literature

1994/95 Power Products Catalog, p/n 5091-9593.

### Ordering Information

	Price
<b>Opt 005</b> 50-Hz AC Input	\$0
<b>Opt 010</b> Chassis Slides (for access to rack-mounted power supplies)	
HP 6260B, 6268B and 6269B	\$204
HP 6274B	\$122
<b>Opt 016</b> 115-Vac $\pm 10\%$ Single-Phase Input (N/A 6269B)	\$129
<b>Opt 022</b> Voltage and Programming Adjust	\$71
<b>Opt 026</b> 115-Vac $\pm 10\%$ , Single-Phase Input (N/A 6269B)	\$0
<b>Opt 027</b> 208-Vac $\pm 10\%$ , Single-Phase Input	\$0
<b>Opt 028</b> 230-Vac $\pm 10\%$ , Single-Phase Input	\$0
<b>Opt 040</b> Resistance Programming Interface (includes Opt 022)	\$92
<b>Opt 910</b> Additional Operating and Service Manual	\$15