

POWER SUPPLIES

General Purpose: 200 to 2000 W Output

HP 6260B-6274B

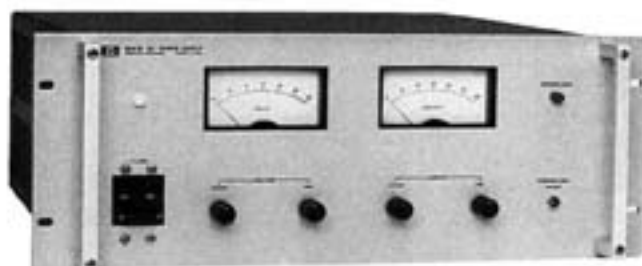
- Built-in overvoltage protection
- Constant voltage/constant current operation
- Remote programming



HP 6263B, 6266B

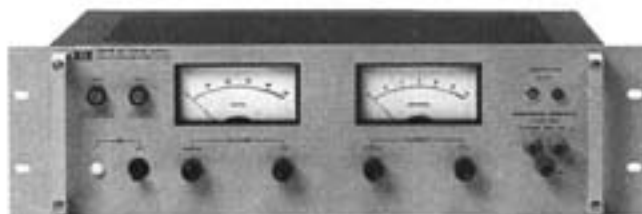


HP 6274B



HP 6260B, 6261B, 6268B, 6269B

- Remote sensing
- Auto-series, -parallel, and -tracking operation
- $\leq 50 \mu\text{s}$ load transient recovery



HP 6264B, 6267B

Description Models 6260B-6274B

This series of high-performance constant voltage/constant current supplies includes nine models with output rating from 10 to 60 V. All models 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 allow the voltage and current outputs to be varied 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 error sensing; and auto-series, auto-parallel, and auto-tracking operation. The crowbar trip point adjustment and associated overvoltage indicator are conveniently located on the front panel.

Auto-series, auto-parallel, and auto-tracking connections should ordinarily include no more than three supplies. If a specific application requires the use of 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. Either the positive or negative output terminal may be grounded or the supplies may be operated floating at up to 120 volts above ground. Models 6263B, 6264B, 6266B, and 6267B are convection cooled. All other models in this series employ cooling fans. Models that output more than 200 watts are equipped with terminal blocks for ac input and are not shipped with line cords.

Specifications

RATINGS			PERFORMANCE							
DC Output		HP Model	Load Effect		Source Effect		PARD (rms/p-p)		Drift (stability)	
Volts	Ampere		Voltage	Current	Voltage	Current	Voltage	Current	Voltage	Current
0 to 10	0 to 100	6260B	0.01% + 200 μV	0.02% + 2 mA	0.01% + 200 μV	0.02% + 2 mA	500 $\mu\text{V}/5 \text{ mV}$	50 mA rms	0.03% + 2 mV	0.03% + 20 mA
0 to 20	0 to 10	6263B	0.01% + 200 μV	0.02% + 500 μA	0.01% + 200 μV	0.02% + 500 μA	200 $\mu\text{V}/10 \text{ mV}$	3 mA rms	0.03% + 500 μV	0.03% + 6 mA
0 to 20	0 to 20	6264B	0.01% + 200 μV	0.02% + 500 μA	0.01% + 200 μV	0.02% + 500 μA	200 $\mu\text{V}/10 \text{ mV}$	5 mA rms	0.03% + 500 μV	0.03% + 6 mA
0 to 20	0 to 50	6261B	0.01% + 200 μV	0.02% + 1 mA	0.01% + 200 μV	0.02% + 1 mA	500 $\mu\text{V}/5 \text{ mV}$	25 mA rms	0.03% + 2 mV	0.03% + 10 mA
0 to 40	0 to 5	6266B	0.01% + 200 μV	0.02% + 500 μA	0.01% + 200 μV	0.02% + 500 μA	200 $\mu\text{V}/10 \text{ mV}$	3 mA rms	0.03% + 500 μV	0.03% + 3 mA
0 to 40	0 to 10	6267B	0.01% + 200 μV	0.02% + 500 μA	0.01% + 200 μV	0.02% + 500 μA	200 $\mu\text{V}/10 \text{ mV}$	3 mA rms	0.03% + 2 mV	0.03% + 3 mA
0 to 40	0 to 30	6268B	0.01% + 200 μV	0.02% + 2 mA	0.01% + 200 μV	0.02% + 2 mA	1 mV/5 mV	20 mA rms	0.03% + 2 mV	0.03% + 5 mA
0 to 40	0 to 50	6269B	0.01% + 200 μV	0.02% + 2 mA	0.01% + 200 μV	0.02% + 2 mA	1 mV/5 mV	25 mA rms	0.03% + 2 mV	0.03% + 10 mA
0 to 60	0 to 15	6274B	0.01% + 200 μV	0.02% + 500 μA	0.01% + 200 μV	0.02% + 500 μA	200 $\mu\text{V}/20 \text{ mV}$	5 mA rms	0.03% + 2 mV	0.03% + 5 mA

Specification—General

Load effect transient recovery: Time, 50 μ s; Level, 10 mV
Resolution: Voltage control, less than 0.02%; current control, less than 0.15%
Temperature coefficient per °C: 0.01% of output plus 200 μ V
Temperature ratings: Operating, 0 to 55° C; storage, -40 to 75° C
Remote control programming: These power supplies are capable of being programmed in constant voltage and constant current operation by using an external resistance or dc voltage with coefficients as shown in the table below.

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 available, see the Options listing in the specifications table below. Standard input voltage, maximum input current, and maximum power are: HP 6260B—230 Vac, 12 A, 1600 W; HP 6263B—115 Vac, 4.5 A, 350 W; HP 6266B—115 Vac, 4 A, 325 W; HP 6268B—230 Vac, 12 A, 1600 W; HP 6261B—230 Vac, 12 A, 1500 W; HP 6264B—115 Vac, 8 A, 600 W; HP 6267B—115 Vac, 8 A, 550 W; HP 6269B—230 Vac, 18 A, 2500 W; HP 6274B—115 Vac, 15 A, 1200 W.

AC line connections: 3-wire, 5-foot ac power cord included—HP 6263B and 6266B.

Three-terminal barrier strip provided on power supply for ac power connections—HP 6260B, 6261B, 6264B, 6267B, 6268B, 6269B and 6274B.

Size: HP 6263B, 6266B: 83.7 mm H \times 483 mm W \times 479.4 mm D (3.296 in \times 19 in \times 18.875 in)
 HP 6264B, 6267B, 6274B: 127 mm H \times 483 mm W \times 479.4 mm D (5.00 in \times 19 in \times 18.875 in)
 HP 6260B, 6261B, 6268B, 6269B: 173 mm H \times 483 mm W \times 479.4 mm D (6.812 in \times 19 in \times 18.875 in)

Option Descriptions

- Opt 005** 50-Hz ac input: Optimizes power supplies that require adjustment/modification for 50-Hz operation. \$0
- Opt 010** Chassis slides. For access to rack mounted power supplies: HP 6263B, 6264B, 6266B, 6267B, HP 6274B, 6260B, 6261B, 6268B, 6269B + \$91
+ \$168
+ \$126
- Opt 016** 115 Vac \pm 10% single phase input. Consists of replacing power transformer and circuit breaker, and reconnecting bias transformer, RFI choke, and fans. + \$64
- Opt 022** Voltage and current programming adjust. Allows the V and I programming coefficients and zero output to be conveniently adjusted to 0.1% accuracy via access holes in the rear panel. Consists of four potentiometers and resistors located inside the rear panel. \$0
- Opt 026** 115 Vac \pm 10%, single phase input. Consists of replacing the input circuit breaker and reconnecting the power transformer, bias transformer, RFI choke, and fans. Models 6261B and 6268B only. \$0
- Opt 027** 208 Vac, \pm 10%, single phase input. Consists of reconnecting power transformer taps, and other components where necessary. \$0
- Opt 028** 230 Vac \pm 10%, single phase input. Consists of reconnecting power transformer taps, and other components where necessary. + \$80
- Opt 040** Multiprogrammer interface. Prepares standard HP power supplies for resistance programming by the HP 6942A, 6944A, or 6954A Multiprogrammers. This option includes Option 022, special calibration, and protection check-out procedures (where required). + \$7.88
- Opt 910** One additional operating and service manual shipped with each power supply: HP 6260B-6274B.

Specifications (continued)

REMOTE CONTROL FEATURES								GENERAL					
Resistance Coefficient		Voltage Coefficient		Speed, UP*		Speed, DOWN*		Overvoltage		Weight		Options	Price
Voltage	Current	Voltage	Current	NL	FL	NL	FL	Range	Margin	Net	Shipping		
200 Ω /V \pm 1%	2 Ω /A \pm 10%	1 V/V \pm 1%	5 mV/A \pm 10%	70 ms	70 ms	200 ms	75 ms	2 to 12 V	5% + 2 V	43.9 kg/97 lb	48 kg/106 lb	5, 10, 16, 22, 27, 40	\$3,360
200 Ω /V \pm 1%	100 Ω /A \pm 10%	1 V/V \pm 1%	50 mV/A \pm 10%	150 ms	150 ms	7 s	350 ms	2 to 23 V	5% + 1 V	15.4 kg/34 lb	18.6 kg/41 lb	5, 10, 22, 27, 28, 40	\$2,130
200 Ω /V \pm 1%	10 Ω /A \pm 10%	1 V/V \pm 1%	25 mV/A \pm 10%	140 ms	140 ms	10 s	150 ms	2.5 to 23V	5% + 1 V	21.3 kg/47 lb	24.5 kg/54 lb	5, 10, 22, 27, 28, 40	\$2,200
200 Ω /V \pm 1%	4 Ω /A \pm 10%	1 V/V \pm 1%	10 mV/A \pm 10%	150 ms	150 ms	250 ms	250 ms	2 to 23 V	5% + 2 V	55.3 kg/78 lb	39.4 kg/87 lb	5, 10, 22, 26, 27, 40	\$3,200
200 Ω /V \pm 1%	200 Ω /A \pm 10%	1 V/V \pm 1%	100 mV/A \pm 10%	275 ms	275 ms	13 s	1.5 s	2.5 to 45 V	5% + 1 V	15.4 kg/34 lb	18.6 kg/41 lb	5, 10, 22, 27, 28, 40	\$2,150
200 Ω /V \pm 1%	100 Ω /A \pm 10%	1 V/V \pm 1%	50 mV/A \pm 10%	275 ms	275 ms	13 s	750 ms	2.5 to 45 V	5% + 1 V	17.7 kg/39 lb	20.8 kg/46 lb	5, 10, 22, 27, 28, 40	\$2,200
200 Ω /V \pm 1%	6 Ω /A \pm 10%	1 V/V \pm 1%	16.7 mV/A \pm 10%	300 ms	300 ms	1 s	650 ms	4 to 45 V	5% + 1 V	34.4 kg/76 lb	38.1 kg/84 lb	5, 10, 22, 26, 27, 40	\$3,060
200 Ω /V \pm 1%	4 Ω /A \pm 10%	1 V/V \pm 1%	10 mV/A \pm 10%	350 ms	350 ms	1 s	600 ms	4 to 45 V	5% + 1 V	40.3 kg/89 lb	44 kg/96 lb	5, 10, 22, 27, 40	\$3,150
300 Ω /V \pm 1%	67 Ω /A \pm 10%	1 V/V \pm 1%	33.3 mV/A \pm 10%	600 ms	600 ms	40 s	800 ms	8 to 66 V	5% + 1 V	21.7 kg/48 lb	24.5 kg/54 lb	5, 10, 22, 27, 28, 40	\$2,450

*Up = increasing output voltage. NL = No output load current. FL = Full rated output load current.