

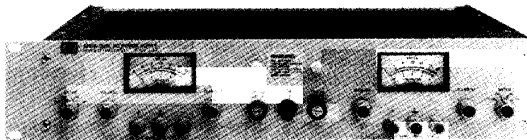
218

POWER SUPPLIES

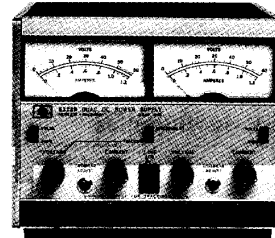
General Purpose, 100- to 120-W Dual Output

HP 6227B, 6228B, 6253A, 6255A

- Constant voltage, constant current
- Remote sensing and programming
- Two identical, independently adjustable outputs
- Auto-series, auto-parallel, and auto-tracking
- Front and rear output terminals



HP 6253A, 6255A



HP 6227B, 6228B

Dual-Output Power Supplies

Each versatile dual-output HP model contains two identical series regulated independently adjustable power supplies (60 W each for the HP 6253A and 6255A; 50 W each for the HP 6227B and 6228B). The HP 6253A and 6255A are full-width rack units; the HP 6227B and 6228B are lab supplies. The HP 6253A and 6255A include a four-position meter-function switch to select either of two output voltage ranges or output current ranges (X1, X0.1) for display.

By combining the versatility of a dual power supply with the flexibility of auto-series and auto-parallel operation, each supply can deliver twice the maximum-rated output voltage or current of each section. In addition, with auto-tracking capability, opposite-polarity voltages are possible.

Convenient front-panel switches select either independent or tracking operation. In the tracking mode, the right supply tracks the left to within $0.2\% \pm 2$ mV. The tracking mode is especially useful for powering operational amplifiers, push-pull stages, deflection systems, or any application where plus and minus voltages must track closely. The independent mode permits operation of the two supplies individually in auto-parallel or in auto-series operation.

Each side of the dual supply can operate as a constant voltage or constant current source, and each has its own crowbar for overvoltage protection. In the tracking mode, an overvoltage condition in any one supply trips both crowbars.

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

		HP 6227B	HP 6228B	HP 6253A	HP 6255A
Output ratings	Voltage	0 to 25 V	0 to 50 V	0 to 20 V	0 to 40 V
	Current	0 to 2 A	0 to 1 A	0 to 3 A	0 to 1.5 A
Load regulation	Voltage	0.01% + 1 mV	0.01% + 1 mV	0.01% + 4 mV	0.01% + 2 mV
	Current	0.01% + 250 μ A	0.01% + 250 μ A	0.01% + 250 μ A	0.01% + 250 μ A
Line regulation	Voltage	1 mV	1 mV	0.02% + 2 mV	0.01% + 2 mV
	Current	100 μ A	100 μ A	0.01% + 250 μ A	0.01% + 250 μ A
Ripple and noise	Voltage	rms	250 μ V	250 μ V	200 μ V
		peak-to-peak	4 mV	4 mV	1 mV
	Current	rms	250 μ A	250 μ A	2 mA
		peak-to-peak	2 mA	2 mA	500 μ A
Load-effect transient recovery		50 μ s, 15 mV	50 μ s, 15 mV	50 μ s, 15 mV	50 μ s, 15 mV

Supplemental Characteristics (nonwarranted characteristics determined by design that are useful in applying the product)

Resistance programming coefficient	Voltage	200 Ω /V \pm 1%	200 Ω /V \pm 1%	200 Ω /V \pm 1%	200 Ω /V \pm 1%
	Current	500 Ω /A \pm 10%	1 k Ω /A \pm 10%	500 Ω /A \pm 10%	500 Ω /A \pm 10%
Voltage programming coefficient	Voltage	1 V/V \pm 1%	1 V/V \pm 1%	1 V/V \pm 1%	1 V/V \pm 1%
	Current	0.5 V/A \pm 10%	1 V/A \pm 10%	0.33 V/A \pm 10%	0.66 V/A \pm 10%
Programming response time (at full load)	Up ¹	200 ms	350 ms	80 ms	45 ms
	Down	75 ms	50 ms	100 ms	40 ms
Overvoltage	Range	5 to 28 V	5 to 55 V	2.5 to 23 V	2.5 to 44 V
	Margin	7% + 1.5 V	7% + 1.5 V	4% + 2 V	4% + 2 V
Input power	Frequency range	48 to 63 Hz	48 to 63 Hz	48 to 440 Hz	48 to 440 Hz
	Max current	2.7 A	2.7 A	2.6 A	2.6 A
	Max power	260 W	260 W	235 W	235 W
Weight	Net	11 kg (24 lb)	11 kg (24 lb)	12.7 kg (28 lb)	12.7 kg (28 lb)
	Shipping	12.9 kg (28 lb)	12.9 kg (28 lb)	17.7 kg (39 lb)	17.7 kg (39 lb)
Options		040	040	010, 011, 028, 040	010, 011, 028, 040
Price		\$3,160	\$3,160	\$2,650	\$2,650

¹Up = increasing output voltage

Key Literature

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

Ordering Information

See the option listings in the tables for applicability.

Option Descriptions

Opt 010 Chassis Slides (enable convenient access to rackmounted power supply for maintenance)	\$122
Opt 011 Internal Overvoltage Protection Crowbar	\$255
Opt 028 230-Vac, 10%, Single-Phase Input	\$0
Opt 040 (equips standard HP power supplies for resistance programming)	\$173
Opt 910 Additional Operating and Service Manual	\$15

Accessories

HP 5060-8760 Blank Filler Panel for HP 6227B, 6228B	\$75
HP 5060-8762 Adapter Frame for Rackmounting one or two HP 6227B, 6228B	\$180