

POWER SUPPLIES

Multiple-Output System Power Supplies, 40 to 80 W

HP 6621A, 6622A, 6623A, 6624A, 6627A

- 2, 3, or 4 independent isolated outputs
- Dual-range linear outputs
- Low ripple and noise
- Fast up- and down-programming



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

Output power	Low-range volts, amps		40-W output	40-W output	80-W output	80-W output
	High-range volts, amps		0 to 7 V, 0 to 6 A	0 to 20 V, 0 to 2 A	0 to 7 V, 0 to 10 A	0 to 20 V, 0 to 4 A
Output combinations for each Hewlett-Packard model (total number of outputs)	HP 6621A (2)		—	—	2	—
	HP 6622A (2)		—	—	—	2
	HP 6623A (3)		1	1	1	—
	HP 6624A (4)		2	2	—	—
	HP 6627A (4)		—	4	—	—
Programming accuracy (at 25° C ± 0° C)	Voltage		10 mV ± 0.06%	50 mV ± 0.06%	10 mV ± 0.06%	50 mV ± 0.06%
	Current		50 mA ± 0.16%	20 mA ± 0.16%	100 mA ± 0.16%	40 mA ± 0.16%
Ripple and noise (peak-to-peak, 20 Hz to 20 MHz; rms, 20 Hz to 10 MHz)	Constant voltage	rms	500 µV	500 µV	500 µV	500 µV
		peak-to-peak	3 mV	3 mV	3 mV	3 mV
	Constant current	rms	1 mA	1 mA	1 mA	1 mA
		peak-to-peak	—	—	—	—
Readback accuracy (at 25° C ± 0° C)	Voltage		20 mV ± 0.05%	50 mV ± 0.05%	20 mV ± 0.05%	50 mV ± 0.05%
	+ Current		10 mA ± 0.1%	4 mA ± 0.1%	20 mA ± 0.1%	8 mA ± 0.1%
	- Current		25 mA ± 0.2%	8 mA ± 0.2%	50 mA ± 0.2%	20 mA ± 0.2%
	Current		1 mA	0.5 mA	2 mA	1 mA
Load regulation	Voltage		2 mV	2 mV	2 mV	2 mV
	Current		1 mA	0.5 mA	2 mA	1 mA
Load cross regulation	Voltage		1 mV	2.5 mV	1 mV	2.5 mV
	Current		1 mA	0.5 mA	2 mA	1 mA
Line regulation	Voltage		0.01% ± 1 mV	0.01% ± 1 mV	0.01% ± 1 mV	0.01% ± 1 mV
	Current		0.00% ± 1 mA	0.00% ± 1 mA	0.00% ± 1 mA	0.00% ± 1 mA

Transient Response Time: Less than 75 µs for the output to recover to within 75 mV of nominal value following a load change within specifications.

Supplemental Characteristics (Non-warranted characteristics determined by design and useful in applying the product.)

Average programming resolution	40-W output		40-W output	80-W output	80-W output	
	Voltage		15 mV	6 mV	15 mV	
Output programming response time (time to settle within 0.1% of full scale output, after Vset command has been processed)	Current		25 mA	10 mA	20 mA	
	OVIP		100 mV	250 mV	100 mV	250 mV
		2 ms		6 ms	2 ms	6 ms

DC Floating Voltage: All outputs can be floated up to ± 240 Vdc from chassis ground.

Remote Sensing: Up to 1-V drop per load lead. The drop in the load leads is subtracted from the voltage available for the load.

Command Processing Time: 7 ms typical with front-panel display disabled.

Down Programming: Current sink limits are fixed approximately 10% higher than source limits for a given operating voltage above 2.5 V.

Input Power: 550 W max

HP-IB Interface Capabilities: SHI, AHI, T6, L4, SRL, RLI, PPI, DC1, DTI

Regulatory Compliance: Listed to UL 1244; certified to CSA 556B; conforms to IEC 348; carries the CE mark

RFI Suppression: Complies with CISPR-II Group 1 Class B

Size: 425.5 mm W × 132.6 mm H × 497.8 mm D (16.75 in × 5.22 in × 19.6 in)

Weight: Net, 17.4 kg (38 lb); shipping, 22.7 kg (50 lb)

Warranty Period: Three years

Key Features (for more information, see page 198)

- HP-IB programming of voltage and current
- Measured voltage and current readback over the HP-IB
- Two outputs can be connected in parallel or in series
- Automatic selection of operating voltage and current range
- Programmable overvoltage and overcurrent protection
- Overtemperature protection

- Self-test occurs at power-on or from an HP-IB command
- Electronic calibration via HP-IB
- IB store-recall states
- Option 750 for relay control and DFI/R1

Key Literature

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

Ordering Information

Model	Price
HP 6621A Dual-Output System Supply	\$4,285
HP 6622A Dual-Output System Supply	\$4,285
HP 6623A Triple-Output System Supply	\$4,795
HP 6624A Quad-Output System Supply	\$5,300
HP 6627A Quad-Output System Supply	\$5,300

Option Descriptions

Standard: 104 to 127 Vac, 47 to 66 Hz, 5.4A	
Opt 100 87 to 106 Vac, 47 to 66 Hz Input, 6.3A (Japan only)	\$0
Opt 220 191 to 233 Vac, 47 to 66 Hz, 3.0A	\$0
Opt 240 209 to 250 Vac, 47 to 66 Hz, 3.0A	\$0
Opt 750 Protection Features and Relay Control	\$280
Opt 908 Rack Mount Kit (HP p/n 5062-3977)	\$41
Opt 909 Rack Mount Kit with Handles (HP p/n 5062-3983)	\$92
Opt 910 Service Manual (HP p/n 5957-6379) and Extra Operating Manual (HP p/n 5957-6377). Standard unit is shipped with operating manual only.	\$56