

POWER SUPPLIES

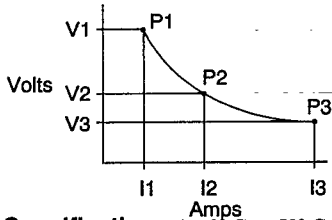
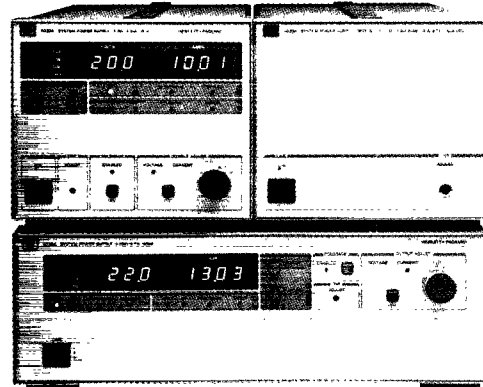
Single-Output System: 200- to 1000-W Autoranging

HP 6030A, 6031A, 6032A, 6033A, 6035A, 6038A

- "One-Box" solution: includes V and I read-back
- Standard Commands for Programmable Instruments (SCPI)
- Autoranging output:



HP 6033A and 6038A;
HP 6033A and 6038A
with Option 001 (on right)



HP 6030A, 6031A, 6032A, and 6035A

Specifications (at 0° C to 50° C unless otherwise noted)

		HP 6030A	HP 6031A	HP 6032A	HP 6033A	HP 6035A	HP 6038A	
Output ratings	Voltage	0-200 V	0-20 V	0-60 V	0-20 V	0-500 V	0-60 V	
	Current	0-17 A	0-120 A	0-50 A	0-30 A	0-5 A	0-10 A	
Autoranging output	V1, P1	200 V, 5 A	20 V, 50 A	60 V, 17.5 A	20 V, 10 A	500 V, 2 A	60 V, 3.3 A	
	V2, P2	120 V, 10 A	14 V, 76 A	40 V, 30 A	14 V, 17.2 A	350 V, 3 A	40 V, 6 A	
	V3, P3	60 V, 17 A	7 V, 120 A	20 V, 50 A	6.7 V, 30 A	200 V, 5 A	20 V, 10 A	
Programming accuracy at 25° C ± 5° C	Voltage	0.035% + 145 mV	0.035% + 15 mV	0.035% + 40 mV	0.035% + 9 mV	0.25% + 400 mV	0.035% + 40 mV	
	Current	0.2% + 25 mA	0.25% + 250 mA	0.2% + 85 mA	0.15% + 20 mA	0.3% + 63 mA	0.09% + 10 mA	
Ripple and noise, 20 Hz to 20 MHz	Constant voltage rms	peak-to-peak	22 mV	8 mV	8 mV	3 mV	50 mV	3 mV
		Constant current rms	50 mV	50 mV	40 mV	30 mV	160 mV	30 mV
	Constant current rms	15 mA	120 mA	25 mA	15 mA	50 mA	5 mA	
Read-back accuracy at 25° C ± 5° C	Voltage	0.08% + 80 mV	0.08% + 7 mV	0.08% + 20 mV	0.07% + 6 mV	0.5% + 300 mV	0.07% + 50 mV	
	Current	0.36% + 15 mA	0.4% + 100 mA	0.36% + 35 mA	0.3% + 25 mA	0.5% + 50 mA	0.2% + 11 mA	
Load regulation	Voltage	0.01% + 5 mV	3 mV	5 mV	2 mV	40 mV	3 mV	
	Current	0.01% + 10 mA	15 mA	10 mA	9 mA	35 mA	5 mA	
Line regulation	Voltage	0.01% + 5 mV	2 mV	3 mV	1 mV	13 mV	2 mV	
	Current	0.01% + 5 mA	25 mA	10 mA	6 mA	18 mA	2 mA	
Transient response time 10% step change	Time	2 ms	2 ms	2 ms	1 ms	5 ms	1 ms	
	Level	150 mV	100 mV	100 mV	50 mV	200 mV	75 mV	

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

DC floating voltage	Either terminal may be grounded or floated up to ± 240 V (± 550 V for the HP 6030A and 6035A) from chassis ground.						
Average programming resolution (supplemental characteristic)	Voltage	50 mV	5 mV	15 mV	5 mV	125 mV	15 mV
	Current	4.25 mA	30 mA	12.5 mA	7.5 mA	1.25 mA	2.5 mA
Programming response time (at full load) (supplemental characteristic)	Up	300 ms (40 Ω)	300 ms	300 ms	100 ms	350 ms (250 Ω)	150 ms
	Down	600 ms (40 Ω)	500 ms	2 s	200 ms	600 ms (250 Ω)	150 ms
	Settling band	300 mV	30 mV	90 mV	5 mV	750 mV	15 mV

Remote sensing: Up to 2 V drop in each lead. Voltage regulation spec met with up to 0.5-V drop, but degrades for greater drops.

Modulation: (Analog programming of output voltage and current)

Input signal: 0 to 5V Ω 0 to 4,000 Ω

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

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

AC Input Current: The HP 6030A, 6031A, 6032A, and 6035A draw 24 A at 100 and 120 Vac, 15 A at 220 Vac, and 14 A at 240 Vac. The HP 6033A and HP 6038A draw 6.0 A at 100 Vac, 6.5 A at 120 Vac, 3.8 A at 220 Vac, and 3.6 A at 240 Vac.

Weight: Net weight 16.3 kg (36 lb) for HP 6030A, 6032, and 6035; 17.2 kg (38 lb) for HP 6031; and 9.6 kg (21 lb) for HP 6033A and HP 6038A. Corresponding shipping weights are 21.8 kg (48 lb), 22.7 kg (50 lb), and 11.4 kg (25 lb).

Size: HP 6033A and 6038A: 212.3 mm W × 177.0 mm H × 443.6 mm D (8.36 in × 6.97 in × 17.87 in) HP 6030A, 6031A, 6032A, and 6035A: 425.5 mm W × 132.6 mm H × 503.7 mm D (16.75 in × 5.2 in × 19.83 in)

Warranty period: Three years

Key Features

See page 198 for descriptions of features.

Key Literature

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

Ordering Information

Opt 001 Front-Panel which has only line switch, line indicator, and OVP adjust (except HP 6035A)

Input Power: Standard unit configured for 104 to 127 Vac, 48 to 63 Hz.

Opt 100 87 to 106 Vac, 48 to 63 Hz (Power-supply output power is derated to 75%.)

Opt 220 191 to 233 Vac, 48 to 63 Hz

Opt 240 208 to 250 Vac, 48 to 63 Hz

For HP models **6030A, 6031A, 6032A, and 6035A**, one of the following line cords **must be specified** when ordering. For details, refer to page 211.

Opt 831 12 AWG, 200 to 240 Vac, Underterminated

Opt 833 1.5-mm² Wire, 200 to 240 Vac, Underterminated

Opt 834 10 AWG, 100 to 120 Vac, Underterminated

Opt 841 With NEMA 6-20P; 20-A, 250-V Plug

Opt 843 With JIS C8303 App. Fig 6(2); 20-A, 250-V Plug

Opt 845 With IEC 309; 16-A, 220-V Plug

Opt 846 With NEMA L5-30P; 30-A, 120-V Locking Plug

Opt 847 With CEE 7/7; 16-A, 220-V Plug

Opt 848 With BS 546; 15-A, 240-V Plug

Opt 800 Rack Mount Kit for Two Units Side by Side (This applies to HP 6033A and 6038A only).

Opt 908 Rack Mount Kit for a Single Unit

HP 6033A and 6038A (with Blank Filler Panel)

HP 6030A, 6031A, 6032A and 6035A

Opt 909 Rack Mount Kit with Handles for

HP Models 6030A, 6031A, 6032A, 6035A

Opt 910 Service Manual and Extra Operating Manual

Accessory

HP 5080-2148 Serial Link Cable, 2 m (6.6 ft)