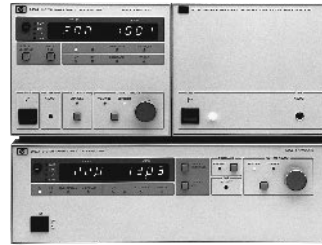




Above: HP 6023A, HP 6028A  
Below: HP 6010A, 6011A, 6012A and 6015A



Above: HP 6033A and HP 6031A (Option 001 on right)  
Below: HP 6030A, 6031A, 6032A, and 6035A,

HP 6010A  
HP 6011A  
HP 6012A  
HP 6015A  
HP 6023A  
HP 6028A  
HP 6030A  
HP 6031A  
HP 6032A  
HP 6033A  
HP 6035A  
HP 6038A

### Abbreviated Specifications and Characteristics

System Autorangers (GPIB)		HP 6030A	HP 6031A	HP 6032A	HP 6033A	HP 6035A	HP 6038A	
Autorangers (w/o GPIB)		HP 6010A	HP 6011A	HP 6012B	HP 6023A	HP 6015A	HP 6028A	
<b>Output ratings</b>	Voltage	0 to 200 V	0 to 20 V	0 to 60 V	0 to 20 V	0 to 500 V	0 to 60 V	
	Current	0 to 17 A	0 to 120 A	0 to 50 A	0 to 30 A	0 to 5 A	0 to 10 A	
<b>Maximum power</b>	Watts	1,200 W	1,072 W	1,200 W	240 W	1,050 W	240 W	
<b>Autoranging output</b>	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	
<b>Programming accuracy</b> (at 25° C ±5° C) System models only	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	
<b>Ripple and noise</b> , (20 Hz to 20 MHz)	Voltage	rms	22 mV	8 mV	5 mV	3 mV	50 mV	3 mV
		p-p	50 mV	50 mV	40 mV	30 mV	160 mV	30 mV
	Current	rms	15 mA	120 mA	25 mA	30 mA	50 mA	5 mA
<b>Readback accuracy</b> (at 25° C ±5° C) System models only	Voltage	0.08% +80 mV	0.08% +7 mV	0.08% +20 mV	0.07% +6 mV	0.5% +200 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	
<b>Load regulation</b>	Voltage	0.01%+	5 mV	3 mV	5 mV	40 mV	3 mV	
	Current	0.01%+	10 mA	15 mA	10 mA	9 mA	.03+34 mA	5 mA
<b>Line regulation</b> System models only	Voltage	0.01%+	5 mV	2 mV	3 mV	13 mV	2 mV	
	Current	0.01%+	5 mA	25 mA	10 mA	6 mA	.03+17 mA	2 mA
<b>Transient response time</b> 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	
<b>dc floating voltage</b> (either terminal can be grounded or floated from chassis ground)		±550 V	±240 V	±240 V	±240 V	±550 V	±240 V	
<b>ac input current</b>	100 Vac (system only)	24 A	24 A	24 A	6.0 A	24 A	6.0 A	
	120 Vac	24 A	24 A	24 A	6.5 A	24 A	6.5 A	
	220 Vac	15 A	15 A	15 A	3.8 A	15 A	3.8 A	
	240 Vac	14 A	14 A	14 A	3.6 A	14 A	3.6 A	
<b>Weight</b>	Net	16.3 kg (36 lb)	17.2 kg (38 lb)	16.3 kg (36 lb)	9.6 kg (21 lb)	16.3 kg (36 lb)	9.6 kg (21 lb)	
	Shipping	21.7 kg (48 lb)	22.7 kg (50 lb)	21.8 kg (48 lb)	11.4 kg (25 lb)	21.7 kg (48 lb)	11.4 kg (25 lb)	
System Autorangers (GPIB)		HP 6030A/	HP 6031A/	HP 6032A/	HP 6033A/	HP 6035A/	HP 6038A/	
Autorangers (w/o GPIB)		HP 6010A/	HP 6011A/	HP 6012B/	HP 6023A/	HP 6015A/	HP 6028A/	

**Remote Sensing:** Up to 2 V drop in each lead. Voltage regulation degrades for greater than 0.5 V drop.

**Regulatory Compliance:** Listed to UL-1244; certified to CSA 556B; complies with EN 61010-1, carries the CE mark

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

**Inductive Load:** HP 6023A, 6028A are stable in CC mode for loads up to 1 H. HP 6010A–6012B, 6015A are stable in CC mode for loads up to 100 mH.

**Size:**

HP 6030A–32A, 6035A: 425.5 mm W x 132.6 mm H x 503.7 mm D (16.75 in x 5.25 in x 19.83 in).

HP 6033A, 6038A, 6023A, 6028A: 212.3 mm W x 177.0 mm H x 516.4 mm D (8.36 in x 6.97 in x 17.87 in).

HP 6010A–12B, 6015A: 425.5 mm W x 132.6 mm H x 516.4 mm D (16.75 in x 5.25 in x 20.33 in).

### Key Literature

1999/00 HP Power Products Catalog, p/n 5968-2199

For more information, visit our web site:

<http://www.hp.com/go/autorangingPS>

### Ordering Information

**Standard:** 104 to 127 VAC, 48 to 63 Hz

**Opt 001** Front panel has only line switch, line indicator, and OVP adjust (HP 6030A–33A and 6038A only)

**Opt 002** Provides extra programming and monitoring capabilities (HP 6010A–12B, 6023A, 6028A only)

**Opt 100** 87 to 106 Vac, 48 to 63 Hz (power supply output is derated to 75%) HP 6030A–33A, 6035A, 6038A only

**Opt 220** 191 to 233 Vac, 48 to 63 Hz

**Opt 240** 209 to 250 Vac, 48 to 63 Hz

**Opt 800** Rackmount Kit for Two Half-rack Units Side by Side. HP p/n 5061-9694 and 5062-3978

**Opt 908** Rackmount Kit for a Single Half-rack Unit HP Models 6023A, 6028A, 6033A and 6038A

(with blank filler panel); HP p/n 5062-3960 HP Models 6010A–12B, 6015A, 6030A–32A and 6035A; HP p/n 5062-3977

**Opt 909** Rackmount Kit with Handles. For HP 6010A–12B, 6015A, 6030A–32A, 6035A; HP p/n 5062-3983

**Opt 910** Service Manual and extra Operating Guide

For HP Models 6010A–12B, 6015A, 6023A, 6028A

For HP Models 6030A–33A, 6035A, 6038A

A line cord option must be specified for HP 6010A–12B, 6015A, 6030A–32A, 6035A. See page 180 for ordering information.

**Accessories**

HP 5080-2148 Serial Link Cable, 2 m (6.6 ft) for HP 6030A,

6031A, 6032A, 6033A, 6035A, and 6038A

HP 1494-0060 Rack Slide Kit