

# Advanced Test Equipment Rentals www.atecorp.com 800-404-ATEC (2832)



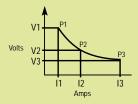
Agilent Performance dc Power Supplies speed and accuracy for test optimization

## Single-Output, Autoranging: 200 W and 1000 W



6010A, 6011A, 6012B, 6015A

**Autoranging Output:** 



Save rack space by using fewer outputs Reduce cost by using fewer power supplies Control with external voltage

This series of dc power supplies take the place of multiple power supplies on your test bench by providing maximum power at a variety of operating points. They have ten-turn front panel pots to allow precise local control. These power supplies also may be connected in auto-parallel or auto-series with their corresponding GPIB unit (6030 Series), as part of a test system.

### Supplemental Characteristics for all model numbers

Remote Sensing: Up to  $2\,\mathrm{V}$  drop in each lead. Voltage regulation specification met with up to  $0.5\,\mathrm{V}$  drop, but degrades for greater drops.

**Modulation**: (analog programming of output voltage and current)

Input signal: 0 to 5 V or 0 to 4 k Ohms Regulatory Compliance: Certified to

CSA556B; conforms to IEC 61010-1.

Size:  $425.5 \text{ mm W} \times 132.6 \text{ mm H} \times 516.4 \text{ mm D}$  (16.75 in x 5.25 in x 20.33 in). See page 99 for more details

Warranty: One year

#### **Ordering Information**

**Opt 120** 104 to 127 Vac, 47 to 63 Hz **Opt 220** 191 to 233 Vac, 48 to 63 Hz

 $\mbox{\font 240}\ \ 209\ \mbox{\font 250}\ \mbox{\font Vac}, \, 48\ \mbox{\font 63}\ \mbox{\font Hz}$ 

\* Opt 908 Rack-mount Kit (p/n 5062-3977)

\* **Opt 909** Rack-mount Kit with Handles. (p/n 5062-3983)

Opt 0L2 Extra Standard Documentation Package
Opt 0B0 No documentation package
Opt J01 Stabilization for loads up to 10 Henries

Control with external voltage

Specifications (at 0° to 55°C unless otherwise specified)	6010A	6011A	6012B	6015A	
Number of outputs	1	1	1	1	
GPIB	No	No	No	No	
Output ratings					
Voltage	0 to 200 V	0 to 20 V	0 to 60 V	0 to 500 V	
Current	0 to 17 A	0 to 120 A	0 to 50 A	0 to 5 A	
Maximum power					
Watts	1,200 W	1,064 W	1,200 W	1,050 W	
Autoranging output V1, I <sub>1</sub>	200 V, 5 A	20 V, 50 A	60 V, 17.5 A	500 V, 2 A	
V2, I <sub>2</sub>	120 V, 10 A	14 V, 76 A	40 V, 30 A	350 V, 3 A	
V3, I <sub>3</sub>	60 V, 17 A	7 V, 120 A	20 V, 50 A	200 V, 5 A	
Ripple and noise, 20 Hz to 20 MHz					
Voltage rms	22 mV	8 mV	8 mV	50 mV	
р-р	50 mV	50 mV	40 mV	160 mV	
Current rms	15 mA	120 mA	25 mA	50 mA	
Load regulation					
Voltage 0.01%+	5 mV	3 mV	5 mV	13 mV	
Current 0.01%+	10 mA	15 mA	10 mA	35 mA	
Transient response time 10% step change					
Time	2 ms	2 ms	2 ms	5 ms	
Level	150 mV	100 mV	100 mV	200 mV	
Supplemental Characteristics (Non-warranted characteristics determined by design that are useful in applying the product)					
Programming resolution Voltage	50 mV	5 mV	15 mV	125 mV	
Current	4.25 mA	30 mA	12.5 mA	1.25 mA	
dc floating voltage either terminal can be grounded or floated from chassis ground	±550 V	±240 V	±240 V	±550 V	
ac input current 100 Vac	24 A	24 A	24 A	24 A	
120 Vac	24 A	24 A	24 A	24 A	
220 Vac	15 A	15 A	15 A	15 A	
240 Vac	14 A	14 A	14 A	14 A	
Weight Net	16.3 kg (36 lb)	17.2 kg (38 lb)	16.3 kg (36 lb)	16.3 kg (36 lb)	
Shipping	21.8 kg (48 lb)	22.7 kg (50 lb)	21.8 kg (48 lb)	21.8 kg (48 lb)	

A line cord option must be specified. See pages 93-98 for ordering information.

\* Support rails required

Accessories 1494-0060 Rack Slide Kit E3663AC Support rails for Agilent rack cabinets

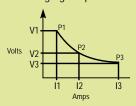
Power Products Catalog 2002-2003

For more detailed specifications see the product manual at www.agilent.com/find/power



## Single-Output, Autoranging: 200 W and 1000 W GPIB

**Autoranging Output:** 



Save rack space by using fewer outputs Reduce cost by using fewer power supplies 6033A, 6038A



6030A, 6031A, 6032A, 6035A

This series of 200 watt and 1000 watt dc power supplies take the place of multiple power supplies in your test system by providing maximum power at a variety of operating points.

Industry standard SCPI commands and VXI*Plug&Play* drivers make system integration easy. Using the serial link, up to 16 power supplies can be connected through one GPIB address. These power supplies have excellent electrical efficiency, making them a good choice for large systems.

Specifications (at 0° to 55°C unless otherwise specified)		6030A	6031A	6032A	6033A	6035A	6038A
Number of outputs		1	1	1	1	1	1
GPIB		Yes	Yes	Yes	Yes	Yes	Yes
Output ratings							
Output 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
Output 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
Maximum power watts		1,200 W	1,064 W	1,200 W	242 W	1,050 W	240 W
Autoranging output	V1, I <sub>1</sub>	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, I <sub>2</sub>	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, I <sub>3</sub>	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 Vo	oltage rms p-p	22 mV 50 mV	8 mV 50 mV	8 mV 40 mV	3 mV 30 mV	50 mV 160 mV	3 mV 30 mV
С	urrent rms	15 mA	120 mA	25 mA	30 mA	50 mA	5 mA
Readback 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	13 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 Level	2 ms 150 mV	2 ms 100 mV	2 ms 100 mV	1 ms 50 mV	5 ms 200 mV 7	1 ms 5 mV



### Autoranging: 200 W and 1000 W GPIB (Continued)

Specifications	6030A	6031A	6032A	6033A	6035A	6038A
(at 0° to 55°C unless otherwise specified)						

## Supplemental Characteristics for all model numbers

Remote Sensing: Up to  $2\ V$  drop in each lead. Voltage regulation specification 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 5 V or 0 to 4 k Ohms

Size: 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). 6033A, 6038A: 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). See page 99 for more details.

Warranty: Three years

Supplemental Char	racteristics	(Non-warranted characteristics determined by design and useful in applying the product)					
Programming resolut	ion Voltage	50 mV	5 mV	15 mV	5 mV	125 mV 1	5 mV
	Current	4.25 mA	30 mA	12.5 mA	7.5 mA	1.25 mA	2.5 mA
dc floating voltage either terminal can be or floated from chassi	•	±550 V	±240 V	±240 V	±240 V	±550 V	±240 V
ac input current	100 Vac	24 A	24 A	24 A	6 A	24 A	6 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
Weight	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	21.8 kg (48 lb)	22.7 kg (50 lb)	21.8 kg (48 lb)	11.4 kg (25 lb)	21.8 kg (48 lb)	11.4 kg (25 lb)

#### **Ordering Information**

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

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

**Opt 120** 104 to 127 Vac, 47 to 63 Hz

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

Opt 240 209 to 250 Vac, 48 to 63 Hz

**Opt 800** Rack-mount Kit for Two Half-rack Units Side by Side. Lock link Kit p/n 5061-9694 and 7 in Rack adapter Kit 5063-9215

- \* Opt 908 Rack-mount Kit for a Single Half-rack Unit 6033A and 6038A (with blank filler panel); p/n 5062-3960, 6030A-32A and 6035A; p/n 5062-3977
- \* **Opt 909** Rack-mount Kit with Handles. For 6030A–32A, 6035A; p/n 5062-3983

**Opt OL2** Extra Standard Documentation Package

Opt 0B3 Service Manual

Opt 0B0 No documentation package

**Opt J01** Stabilization for loads up to 10 Henries (not available on 6033A)

A line cord must be specified for 6030A-32A, 6035A. See pages 93-98 for ordering information.

#### Accessories

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

**1494-0060** Rack Slide Kit

 $\textbf{E3663AC} \ \ \textbf{Support rails for Agilent rack} \\ \textbf{cabinets}$ 

<sup>\*</sup> Support rails required

#### Your Requested Excerpt from the Agilent Power Products Catalog

The preceding page(s) are an excerpt from the 2002-2003 Power Products Catalog. We hope that these pages supply the information that you currently need. If you would like to have further information about the extensive selection of Agilent dc power supplies, ac sources, and dc electronic loads, please visit <a href="https://www.agilent.com/find/power">www.agilent.com/find/power</a> to print a copy of the complete Power Products catalog, or to request that a copy be sent to you. You will also find a lot of other useful information on this web site.

In the full Power Products Catalog, you will find that Agilent offers much more than basic power generation. If you need basic, clean, power for your lab bench, it's there. But in each product category, we've also integrated the capabilities that you need for a complete power solution, including extensive measurement and analysis capabilities.

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Product specifications and descriptions in this document subject to change without notice.

