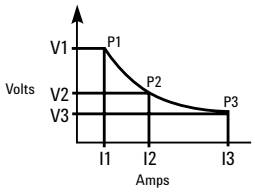
6010A, 6011A, 6012B, 6015A

Single-Output, Autoranging
200 W and 1000 W

Autoranging Output:



- Autoranging outputs provide maximum power at a variety of operating voltages
- Analog/resistance control of output voltage and current
- Series and auto-parallel connections enable greater output flexibility
- Protection features to ensure DUT safety

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 series with their corresponding GPIB unit (6030 Series), as part of a test system.

Application Notes:

10 Practical Tips You Need to Know About Your Power Products
5965-8239E

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_1	200 V, 5 A	20 V, 50 A	60 V, 17.5 A	500 V, 2 A
	V2, I_2	120 V, 10 A	14 V, 76 A	40 V, 30 A	350 V, 3 A
	V3, I_3	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
p-p		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)

More detailed specifications at **www.agilent.com/find/6010**

Single-Output, Autoranging
200 W and 1000 W (Continued)

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

Regulatory Compliance: Certified to CSA556B; conforms to IEC 61010-1.

Size: 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).

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
Opt 240 209 to 250 Vac, 48 to 63 Hz
* **Opt 908** Rack-mount Kit (p/n 5062-3977)
* **Opt 909** Rack-mount Kit with Handles. (p/n 5062-3983)
Opt 0L1 Full documentation on CD-ROM, and printed standard documentation package
Opt 0L2 Extra copy of standard printed documentation package
Opt 0B0 Full documentation on CD-ROM only
Opt J01 Stabilization for loads up to 10 Henries

A line cord option must be specified, see the AC line voltage and cord section.

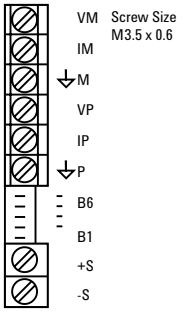
*Support rails required

Accessories

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

Agilent Models: 6010A, 6011A, 6012B, 6015A

Terminal Strip Detail



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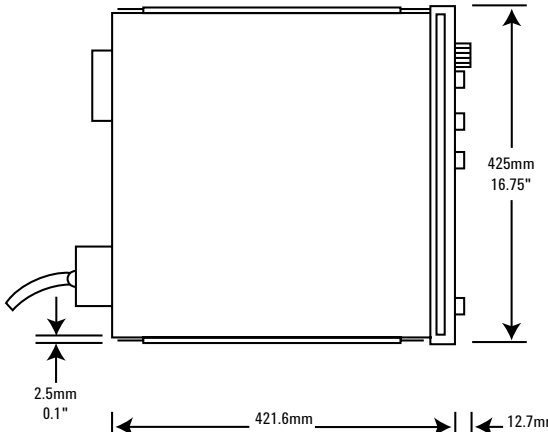
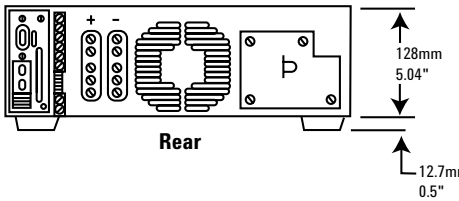




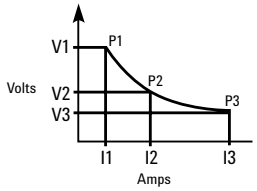
More detailed specifications at **www.agilent.com/find/6010**

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

Single-Output, Autoranging
200 W and 1000 W GPIB

- Autoranging outputs provide maximum power at a variety of operating voltages
- Analog/resistance control of output voltage and current
- Series and auto-parallel connections of multiple supplies
- Built-in measurements and advanced programmable features
- Protection features to ensure DUT safety

Autoranging Output:



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.

Application Notes:

10 Hints for Using Your Power Supply to Decrease Test Time
5968-6359E

10 Practical Tips You Need to Know About Your Power Products
5965-8239E

Agilent DC Power Supplies for Base Station Testing
5988-2386EN

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_1	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_2	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_3	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	Voltage rms	22 mV	8 mV	8 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
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% +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
Load regulation							
Voltage	0.01%+	5 mV	3 mV	5 mV	2 mV	40 mV	3 mV
Current		0.01%+ 10 mA	0.01%+ 15 mA	0.01%+ 10 mA	0.01%+ 9 mA	0.03%+ 34 mA	0.01%+ 5 mA
Line regulation							
Voltage		0.01%+ 5 mV	0.01%+ 2 mV	0.01%+ 3 mV	0.01%+ 1 mV	0.03%+ 17 mV	0.01%+ 2 mV
Current		0.01%+ 5 mA	0.01%+ 25 mA	0.01%+ 10 mA	0.01%+ 6 mA	0.03%+ 17 mA	0.01%+ 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 7	5 mV

More detailed specifications at **www.agilent.com/find/6030**

Autoranging: 200 W and 1000 W GPIB (Continued)

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

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

Software Driver:
VXI*Plug&Play*

Warranty: One year

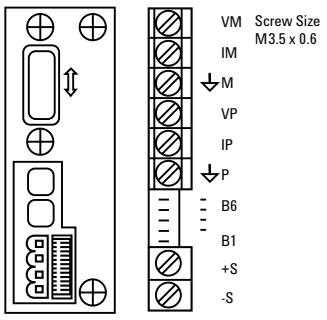
Size: 6030A–32A, 6035A:
425.5 mm W x 132.6 mm H x 503.7 mm D
(16.75 in x 5.25 in x 19.83 in).
6033A, 6038A:
212.3 mm W x 177.0 mm H x 516.4 mm D
(8.36 in x 6.97 in x 17.87 in).

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

		6030A	6031A	6032A	6033A	6035A	6038A
Programming resolution	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 grounded or floated from chassis ground		±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)

Agilent Models: 6030A, 6031A, 6032A, 6035A

Terminal Strip Detail



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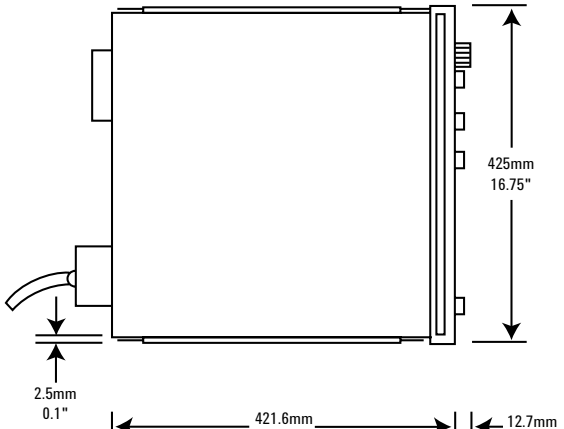
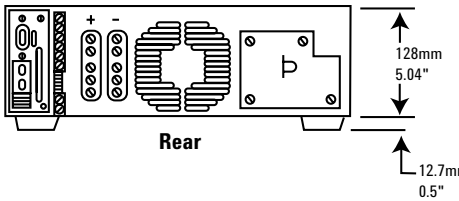




More detailed specifications at **www.agilent.com/find/6030**

Autoranging: 200 W and 1000 W GPIB (Continued)

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 0L1 Full documentation on CD-ROM, and printed standard documentation package

Opt 0L2 Extra copy of standard printed documentation package

Opt 0B3 Service Manual

Opt 0B0 Full documentation on CD-ROM only

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

A line cord option must be specified, see the AC line voltage and cord section.

* Support rails required

Accessories

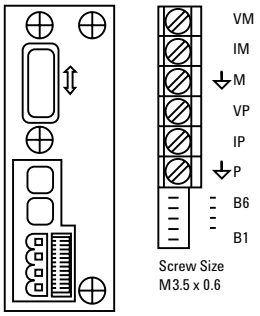
5080-2148 Serial Link Cable, 2 m (6.6 ft)

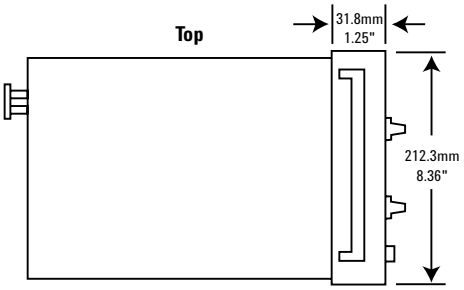
1494-0060 Rack Slide Kit

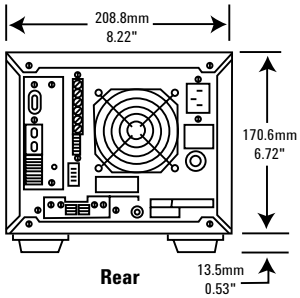
E3663AC Support rails for Agilent rack cabinets

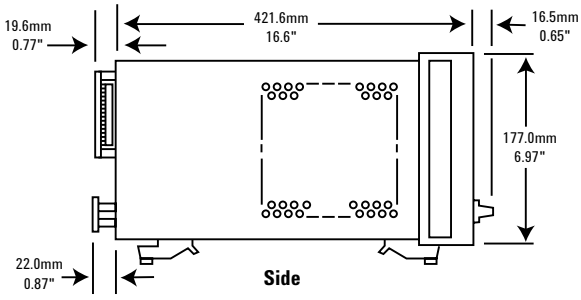
Agilent Models: 6033A, 6038A

Terminal Strip Detail









More detailed specifications at **www.agilent.com/find/6030**

Your Requested Excerpt from the
Agilent System and Bench Instruments Catalog 2006
The preceding page(s) are an excerpt from the 2006 System and Bench Instruments 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, please visit **www.agilent.com/find/power** to print a copy of the complete 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 System and Bench Instruments Catalog, you will find that Agilent offers much more than DC power supplies. This catalog contains detailed technical and application information on digital multimeters, DC power supplies, arbitrary waveform generators, and many more instruments. If you need basic, clean, power for your lab bench, it's there. In each power product category we have also integrated the capabilities you need for a complete power solution, including extensive measurement and analysis capabilities.

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Printed in the USA, February 8, 2006

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