



# Agilent 6030 Series Single-Output, DC Power Supplies 200 W & 1000 W, Autoranging; GPIB

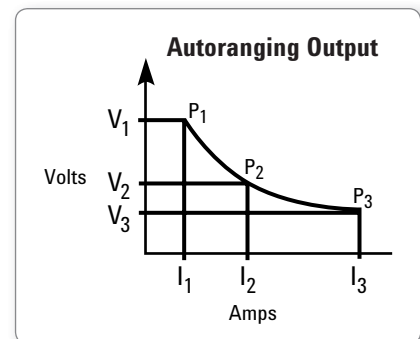
## Data Sheet



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 *VXIplug&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.

- 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



## Specifications

Specifications <i>(at 0 ° to 50 ° unless otherwise specified)</i>		6030A	6031A	6032A	6033A	6035A	6038A
<b>Number of outputs</b>		1	1	1	1	1	1
<b>GPIB</b>		Yes	Yes	Yes	Yes	Yes	Yes
<b>Output ratings</b>							
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
<b>Maximum power watts</b>		1,200 W	1,064 W	1,200 W	240 W	1,050 W	240 W
<b>Auto-ranging output</b>	V <sub>1</sub> , 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
	V <sub>2</sub> , 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
	V <sub>3</sub> , 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
<b>Programming accuracy</b> 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
<b>Ripple and noise</b> 20 Hz to 20 MHz	Voltage rms P-P	22 mV	8 mV	8 mV	3 mV	50 mV	3 mV
		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	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	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
<b>Line regulation</b>							
Voltage	0.01%+	5 mV	2 mV	3 mV	1 mV	13 mV	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
<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 7	5 mV

### 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 kΩ

**Software driver:** VXIplug&play

#### 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).

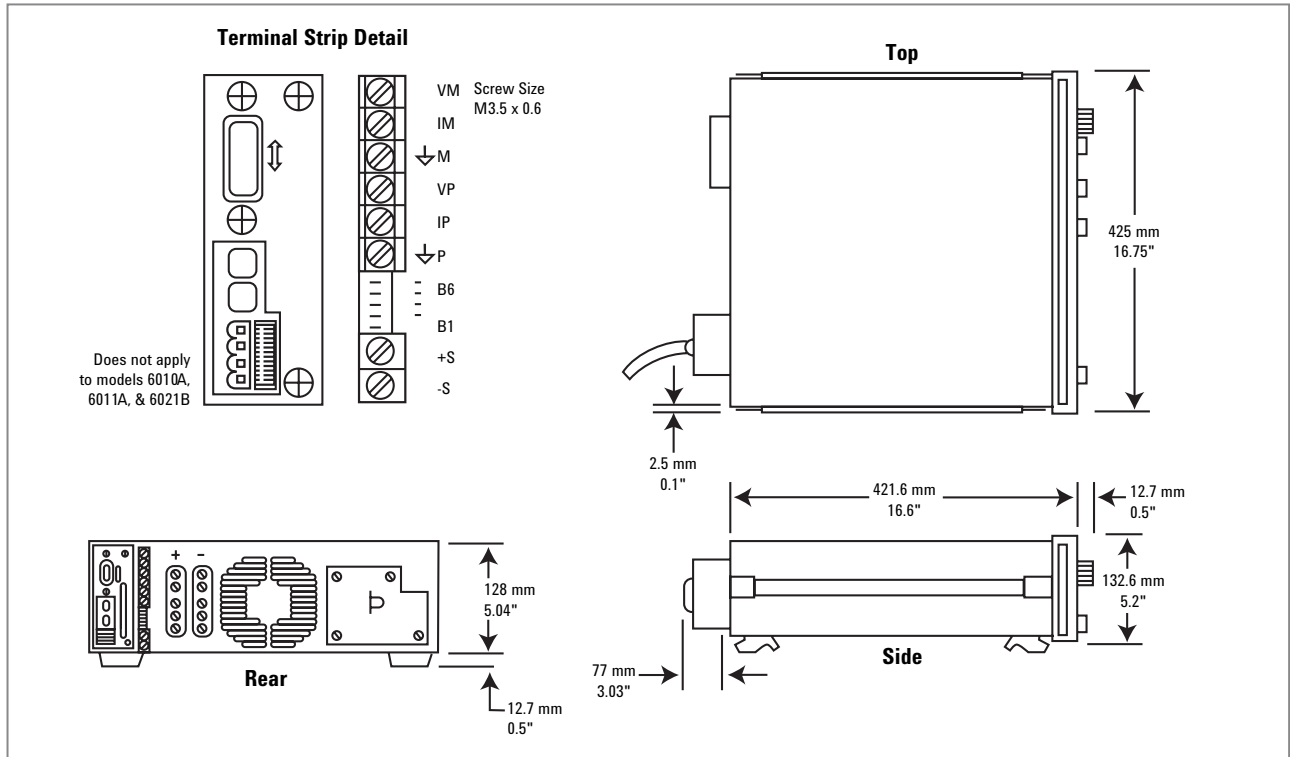
6033A, 6038A:

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).

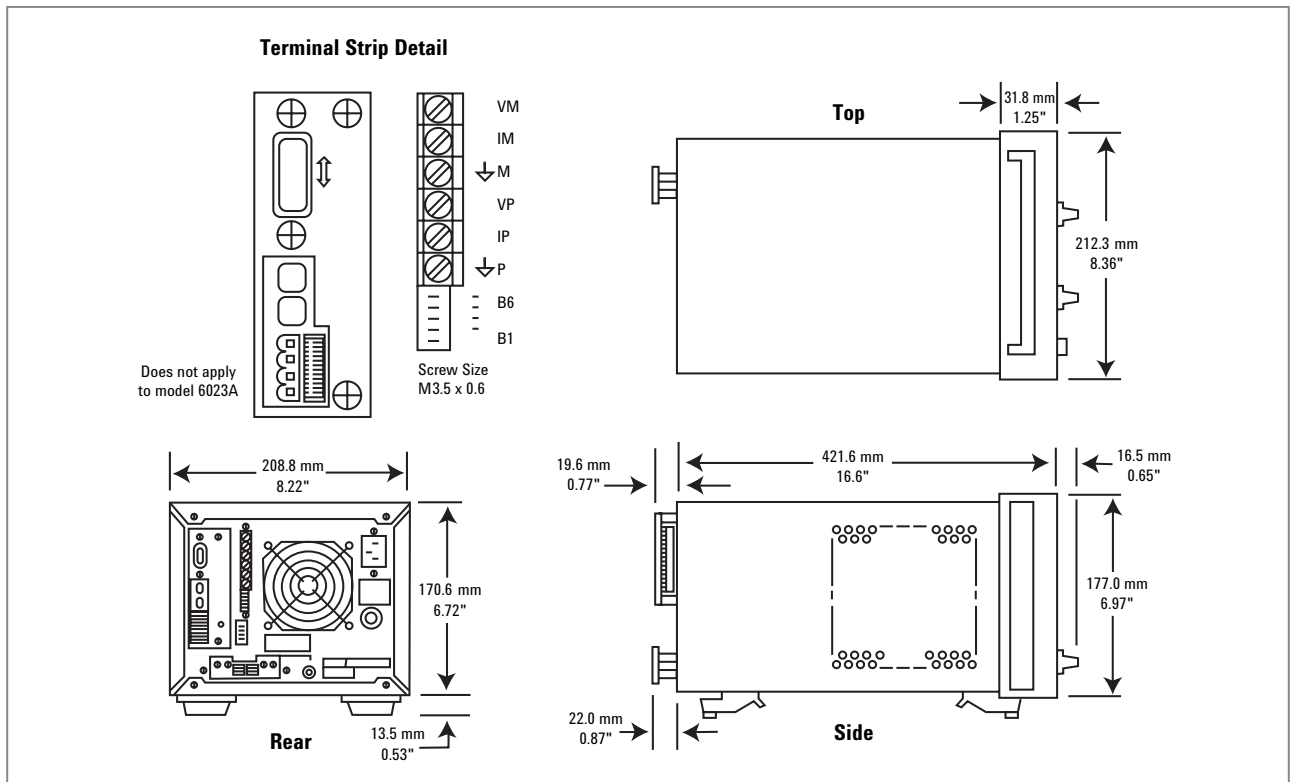
**Warranty:** One year

Supplemental Characteristics <i>(at 0 ° to 50 ° unless otherwise specified)</i>		6030A	6031A	6032A	6033A	6035A	6038A
(Non-warranted characteristics determined by design and useful in applying the product)							
<b>Programming resolution</b>	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
<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	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
<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	21.8 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



Agilent Models: 6033A, 6038A



## Ordering information

6030 Series power supplies ship with product reference CD-ROM including: VXi plug&play drivers, operating manual, service manual, quick start guide, and application notes.

**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 0L1** Printed operating manual (in English)

**Opt 0B3** Printed service manual (in English)

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

### Accessories

**5080-2148** Serial link cable, 2 m (6.6 ft)

**1494-0060** Rack slide kit

**E3663AC** Support rails for Agilent rack cabinets

*For models: 6033A and 6038A:*

**1CM001A\***: Rackmount flange kit 177.0 mm H (4U) - one bracket, one half-module bracket

**1CM034A\*** Rack mount flange kit 177.0 mm H (4U) - two flange brackets and lock link kit for mounting two 6033A or 6038A units side by side.

*For models: 6030A, 6031A, 6032A, 6035A*

**1CM003A\***: Rackmount flange kit 132.6 mm H (3U) - two flange brackets

**1CP002A\***: Rackmount flange and handle kit 132.6 mm H (3U) - two brackets and front handles

### 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

\*Support rails required



Agilent Advantage Services is committed to your success throughout your equipment's lifetime. To keep you competitive, we continually invest in tools and processes that speed up calibration and repair and reduce your cost of ownership. You can also use Infoline Web Services to manage equipment and services more effectively. By sharing our measurement and service expertise, we help you create the products that change our world.

[www.agilent.com/find/advantageservices](http://www.agilent.com/find/advantageservices)



### Agilent Email Updates

[www.agilent.com/find/emailupdates](http://www.agilent.com/find/emailupdates)  
Get the latest information on the products and applications you select.

### Agilent Channel Partners

[www.agilent.com/find/channelpartners](http://www.agilent.com/find/channelpartners)  
Get the best of both worlds: Agilent's measurement expertise and product breadth, combined with channel partner convenience.

[www.agilent.com](http://www.agilent.com)

[www.agilent.com/find/6030](http://www.agilent.com/find/6030)

For more information on Agilent Technologies' products, applications or services, please contact your local Agilent office. The complete list is available at: [www.agilent.com/find/contactus](http://www.agilent.com/find/contactus)

### Americas

Canada	(877) 894 4414
Brazil	(11) 4197 3600
Mexico	01800 5064 800
United States	(800) 829 4444

### Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 112 929
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Other AP Countries	(65) 375 8100

### Europe & Middle East

Belgium	32 (0) 2 404 93 40
Denmark	45 45 80 12 15
Finland	358 (0) 10 855 2100
France	0825 010 700*
	*0.125 €/minute
Germany	49 (0) 7031 464 6333
Ireland	1890 924 204
Israel	972-3-9288-504/544
Italy	39 02 92 60 8484
Netherlands	31 (0) 20 547 2111
Spain	34 (91) 631 3300
Sweden	0200-88 22 55
United Kingdom	44 (0) 118 927 6201

*For other unlisted countries:*

[www.agilent.com/find/contactus](http://www.agilent.com/find/contactus)

Revised: January 6, 2011

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

© Agilent Technologies, Inc. 2012  
Published in USA, July 30, 2012  
5990-9297EN



Agilent Technologies