

Single-Output: 200 W

- Linear output regulation
- Fast up- and down-programming
- SCPI (Standard Commands for Programmable Instruments)
- Complete front-panel control calibration and display
- Remote programming and sensing
- Fan-speed control to minimize acoustic noise
- Low ripple and noise
- Over-voltage and over-current protection
- Serial link connects up to 16 units to one GPIB address
- VXI *plug&play* drivers



6641A - 6645A

E

System
dc Power
Supplies

SPECIFICATIONS

(at 0° to 55° C unless otherwise specified)

		6641A	6642A	6643A	6644A	6645A
Output ratings	Output voltage	0 to 8 V	0 to 20 V	0 to 35 V	0 to 60 V	0 to 120 V
	Output current (40° C)	0 to 20 A	0 to 10 A	0 to 6 A	0 to 3.5 A	0 to 1.5 A
	Maximum current (50° C/55° C)	18 A/17 A	9 A/8.5 A	5.4 A/5.1 A	3.2 A/3 A	1.4 A/1.3 A
Programming accuracy at 25° C ±5° C	Voltage	0.06% +	5 mV	10 mV	15 mV	26 mV
	Current	0.15% +	26 mA	13 mA	6.7 mA	4.1 mA
Ripple and noise from 20 Hz to 20 MHz	Voltage rms	300 μV	300 μV	400 μV	500 μV	700 μV
	peak-peak	3 mV	3 mV	4 mV	5 mV	7 mV
	Current rms	10 mA	5 mA	3 mA	1.5 mA	1 mA
Readback accuracy at 25° C ±5° C (percent of reading plus fixed)	Voltage	0.07% +	6 mV	15 mV	25 mV	40 mV
	+Current	0.15% +	18 mA	9.1 mA	5 mA	3 mA
	-Current	0.35% +	40 mA	20 mA	12 mA	6.8 mA
Load regulation	Voltage	1 mV	2 mV	3 mV	4 mV	5 mV
	Current	1 mA	0.5 mA	0.25 mA	0.25 mA	0.25 mA
Line regulation	Voltage	0.5 mV	0.5 mV	1 mV	1 mV	2 mV
	Current	1 mA	0.5 mA	0.25 mA	0.25 mA	0.25 mA
Transient response time	Less than 100 μs for the output voltage to recover to its previous level (within 0.1% of the voltage rating of the supply or 20 mV, whichever is greater) following any step change in load current of up to 50% of rated current					
Supplemental Characteristics (Non-warranted characteristics determined by design and useful in applying the product)						
Average resolution	Voltage	2 mV	5 mV	10 mV	15 mV	30 mV
	Current	6 mA	3 mA	2 mA	1.2 mA	0.5 mA
	OVP	13 mV	30 mV	54 mV	93 mV	190 mV
OVP accuracy		160 mV	400 mV	700 mV	1.2 V	2.4 V

dc Floating Voltage: Output terminals can be floated up to ±240 Vdc from chassis ground

Remote Sensing: Up to half the rated output voltage can be dropped in each load lead. The drop in the load leads subtracts from the voltage available for the load.

Command Processing Time: Average time required for the output voltage to begin to change following receipt of digital data is 20 ms for the power supplies connected directly to the GPIB

Output Programming Response Time: The rise and fall time (10/90% and 90/10%) of the output voltage is less than 15 ms. The output voltage change settles within 1 LSB (0.025% x rated voltage) of final value in less than 60 ms.

Down Programming: An active down programmer sinks approximately 20% of the rated output current

Modulation: (Analog programming of output voltage and current)

Input Signal: 0 to -5 V

Input Impedance: 10 k Ohm nominal

ac Input: (ac input frequency 47 to 63 Hz)

Voltage	100 Vac	120 Vac	220 Vac	240 Vac
Current	4.4 A	3.8 A	2.2 A	2.0 A

Input Power: 480 VA, 400 W at full load; 60 W at no load

GPIB Interface Capabilities SH1, AH1, T6, L4, SR1, RL1, PP0, DC1, DT1, E1, and C0. IEEE-488.2 and SCPI-compatible command set

Regulatory Compliance: Complies with UL 3111-1, IEC 61010-1.

Size: 425.5 mm W x 88.1 mm H x 439 mm D (16.75 in x 3.5 in x 17.3 in)

See page 52 for more details.

Weight: Net, 14.2 kg (31.4 lb); shipping, 16.3 kg (36 lb)

Warranty Period: Three years

Ordering Information

Standard: 104 to 127 Vac, 47 to 63 Hz

Opt 100 87 to 106 Vac, 47 to 63 Hz

Opt 220 191 to 233 Vac, 47 to 63 Hz

Opt 240 209 to 250 Vac, 47 to 63 Hz

***Opt 908** Rack-mount Kit (p/n 5063-9212)

***Opt 909** Rack-mount Kit w/ Handles (p/n 5063-9219)

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

*Support rails required

Accessories

p/n 1494-0060 Accessory Slide Kit

p/n 1252-3698 7-pin Analog Plug

p/n 1252-1488 4-pin Digital Plug

p/n 5080-2148 Serial Link Cable 2 m (6.6 ft)

E3663AC Support rails for Agilent rack cabinets

Your Requested Excerpt from the Agilent Power Products Catalog

The preceding page(s) are an excerpt from the *2001-2002 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 www.agilent.com/find/power 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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To see a copy of the user's guide, please visit our Web site at www.agilent.com/find/manuals

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



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