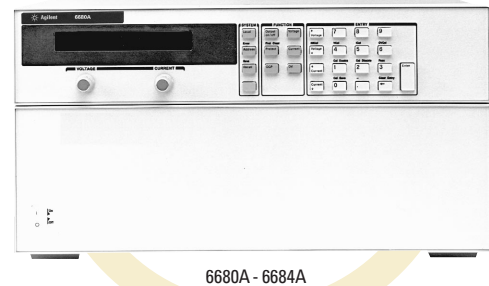


Single-Output: 5,000 W

- “One Box” solution: includes V and I read-back
- Low ripple and noise
- Fast up-and down-programming
- High-accuracy current programming and read back
- Standard Commands for Programmable Instruments (SCPI)
- Selectable compensation for inductive loads
- Serial link connects up to 16 units to one GPIB address
- VXI *plug&play* drivers



E

System
dc Power
Supplies

SPECIFICATIONS

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

		6680A	6681A	6682A	6683A	6684A	
Output ratings	Voltage	0 to 5 V	0 to 8 V	0 to 21 V	0 to 32 V	0 to 40 V	
	Current (40° C then derate linearly 1%/° C from 40° to 55° C)	0 to 875 A	0 to 580 A	0 to 240 A	0 to 160 A	0 to 128 A	
Programming accuracy at 25° C ±5° C	Voltage	0.04% +	5 mV	8 mV	21 mV	32 mV	40 mV
	Current	0.1% +	450 mA	300 mA	125 mA	85 mA	65 mA
Ripple and noise from 20 Hz to 20 MHz	Constant voltage	rms	1.5 mV	1.5 mV	1.0 mV	1.0 mV	1.0 mV
		peak-to-peak	10 mV	10 mV	10 mV	10 mV	10 mV
	Constant current	rms	290 mA	190 mA	40 mA	28 mA	23 mA
Readback accuracy at 25° C ±5° C (percent of reading plus fixed)	Voltage	0.05% +	7.5 mV	12 mV	32 mV	48 mV	60 mV
	Current	0.1% +	600 mA	400 mA	165 mA	110 mA	90 mA
Load and line regulation	Voltage	0.002% +	0.19 mV	0.3 mV	0.65 mV	1.1 mV	1.5 mV
	Current	0.005% +	65 mA	40 mA	17 mA	12 mA	9 mA
Transient response time	Less than 900 μs for the output voltage to recover within 150 mV following a change in load from 100% to 50%, or 50% to 100% of the output current rating of the supply						
Supplemental Characteristics (Non-warranted characteristics determined by design that are useful in applying this product)							
Average programming resolution	Voltage	1.35 mV	2.15 mV	5.7 mV	8.6 mV	10.8 mV	
	Current	235 mA	155 mA	64 mA	43 mA	34 mA	
	OVP	30 mV	45 mV	120 mV	180 mV	225 mV	
Output voltage programming response time (excludes command-processing time)	Full-load programming rise or fall time (10 to 90% or 90 to 10%, resistive load)	9 ms	12 ms	45 ms	60 ms	60 ms	
Output common-mode noise current (to signal-ground binding post)	rms	1.5 mA	1.5 mA	3 mA	3 mA	3 mA	
	peak-to-peak	10 mA	10 mA	20 mA	20 mA	20 mA	

dc Floating Voltage: Output terminals can be floated up to ±60 Vdc maximum 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 power supplies connected directly to the GPIB

Modulation: (analog programming of output voltage and current):
Input Signal: 0 to -5 V for voltage, 0 to +5 V for current
Input Impedance: 30 kΩ or greater

ac Input (47 to 63 Hz): 180 to 235 Vac (line-to-line, 3 phase), 27.7 A rms maximum worst case, 21.4 A rms nominal; 360 to 440 Vac, 14.3 A rms maximum worst case, 10.7 A rms nominal (maximum line current includes 5% unbalanced phase voltage condition.)
Output voltage derated 5% at 50 Hz and below 200 Vac.

Input Power: 7350 VA and 6000 W maximum; 160 W at no load

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

Size: 425.5 mm W x 221.5 mm H x 674.7 mm D (16.75 in x 8.75 in x 25.56 in) See page 55 for more details

Weight: Net, 51.3 kg (113 lb); shipping, 63.6 kg (140 lb)

Warranty Period: Three years

Ordering Information

Opt 400 360 to 440 Vac, 3 phase, 47 to 63 Hz

Opt 601 Output bus bar, cover and spacer kit for bench applications where leads must be oriented vertically. (Order separately as p/n 5060-3515).

Opt 602 Two Bus Bar Spacers for paralleling power supplies (p/n 5060-3514)

***Opt 908** Rack-mount Kit (p/n 5062-3977 and p/n 5063-9212)

***Opt 909** Rack-mount Kit with Handles (p/n 5063-9221 and p/n 5063-9219).

Opt 910 Service Manual, extra Operating Guide and Programming Guide

*Support rails required

ACCESSORIES

p/n 5060-3513 Three 30-A Replacement Fuses for 180 to 235 Vac line

p/n 5060-3512 Three 16-A Replacement Fuses for 360 to 440 Vac line

E3663AC Support rails for Agilent rack cabinets

p/n 5080-2148 Serial link cable 2m (6.6 ft.)

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.