

Keysight Technologies


6620A Series Multiple-Output, 40-105 W DC Power Supplies, GPIB

Speed and accuracy for test optimization

- Up to four fully isolated power supplies in a 3U package
- Dual-range outputs
- Fast, low-noise outputs
- Built-in measurements and advanced programmable features
- Protection features to ensure DUT safety

Data Sheet





Two, three, or four isolated outputs are integrated into one package, conserving rack space and GPIB addresses. Most of the outputs also provide dual ranges, for more current at lower voltage levels. The outputs can be connected in parallel or series to further increase the flexibility that these products offer the system designer.

Programming is done using industry standard SCPI commands. Test system integration can be further simplified by using the VXI*plug&play* drivers. These power supplies help reduce test time with fast up and down programming, enhanced by an active downprogrammer which can sink the full rated current.

Specifications

Specifications (at 0 ° to 55 ° unless otherwise specified)	40 W output	40 W output	80 W output	80 W output	105 W output	
Output power						
Low-range; voltage, current	0 to 7 V 0 to 5 A	0 to 20 V 0 to 2 A	0 to 7 V 0 to 10 A	0 to 20 V 0 to 4 A	0 to 35 V 0 to 3 A	
High-range; voltage, current	0 to 20 V 0 to 2 A	0 to 50 V 0 to 0.8 A	0 to 20 V 0 to 4 A	0 to 50 V 0 to 2 A	— —	
Output combinations for each model (total number of outputs)						
6621A (2)	—	—	2	—	—	
6622A (2)	—	—	—	2	—	
6623A (3)	1	1	1	—	—	
6624A (4)	2	2	—	—	—	
6627A (4)	—	4	—	—	—	
6623A-J03 (3) Special order option	—	2	—	—	1	
Programming accuracy at 25 °C ± 5 °C						
Voltage	0.06% +	19 mV	50 mV	19 mV	50 mV	35 mV
Current	0.16% +	50 mA	20 mA	100 mA	40 mA	30 mA
Readback accuracy at 25 °C ± 5 °C						
Voltage	0.05% +	20 mV	50 mV	20 mV	50 mV	35 mV
+Current	0.1% +	10 mA	4 mA	20 mA	8 mA	6 mA
-Current	0.2% +	25 mA	8 mA	50 mA	20 mA	15 mA
Ripple and noise (peak-to-peak, 20 Hz to 20 MHz; rms, 20 Hz to 10 MHz)						
Constant voltage rms		500 μV	500 μV	500 μV	500 μV	500 μV
peak-to-peak		3 mV	3 mV	3 mV	3 mV	3 mV
Constant current rms		1 mA	1 mA	1 mA	1 mA	1 mA
Load regulation						
Voltage		2 mV	2 mV	2 mV	2 mV	2 mV
Current		1 mA	0.5 mA	2 mA	1 mA	2 mA
Load cross regulation						
Voltage		1 mV	2.5 mV	1 mV	2.5 mV	2 mV
Current		1 mA	0.5 mA	2 mA	1 mA	2 mA
Line regulation						
Voltage	0.1% +	1 mV	1 mV	1 mV	1 mV	1 mV
Current	0.06% +	1 mA	01 mA	01 mA	1 mA	1 mA
Transient response time Less than 75 μs for the output to recover to within 75 mV of nominal value following a load change within specifications						

Supplemental Characteristics (Non-warranted characteristics determined by design and useful in applying the product)	40 W output	40 W output	80 W output	80 W output	105 W output
Average programming resolution					
Voltage	6 mV	15 mV	6 mV	15 mV	10.5 mV
Current	25 mA	10 mA	50 mA	20 mA	15 mA
OVP	100 mV	250 mV	100 mV	250 mV	175 mV
Output programming response time (time to settle within 0.1% of full scale output, after Vset command has been processed)					
	2 ms	6 ms	2 ms	6 ms	6 ms

Supplemental characteristics for all model numbers

DC floating voltage: Output terminals can be floated up to ± 240 VDC from chassis ground

Remote sensing: Up to 1 V drop per load lead. The drop in the load leads subtracts from the voltage available for the load.

Command processing time: 7 ms typical with front-panel display disabled

Output programming: Current sink limits are fixed approximately 10% higher than source limits for a given operating voltage above 2.5 V.

Input power: 550 W max., 720 VA max.

GPIB interface capabilities: SH1, AH1, T6, L4, SR1, RL1, PP1, DC1, DT0

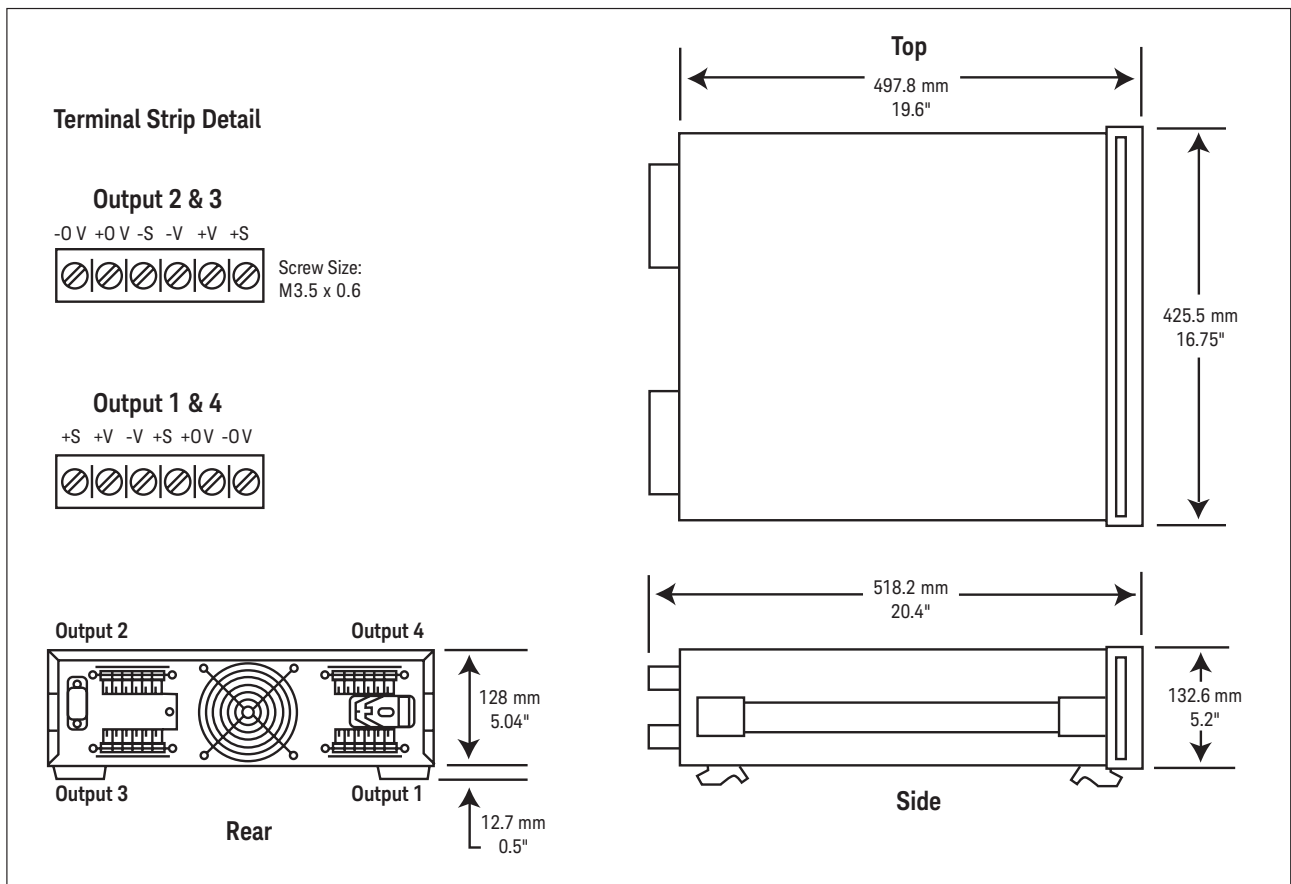
Software driver: VXIplug&play

Regulatory compliance: Listed to UL1244; conforms to IEC 61010-1; carries the CE mark.

Size: 425.5 mm W x 132.6 mm H x 497.8 mm D (16.75 in x 5.22 in x 19.6 in)

Weight: Net, 17.4 kg (38 lb); shipping, 22.7 kg (50 lb)

Keysight Models: 6621A, 6622A, 6623A, 6624A, 6627A



Ordering information

Product ships with full documentation on CD-ROM.
CD-ROM includes operating manual, service manual,
and application notes.

Opt 100 87 to 106 VAC, 47 to 66 Hz input, 6.3 A
(Japan only)

Opt 120 104 to 127 VAC, 47 to 63 Hz

Opt 220 191 to 233 VAC, 47 to 66 Hz

Opt 240 209 to 250 VAC, 47 to 66 Hz input, 3.0 A

Opt 750 Relay control and DFI/RI

Opt S50 Similar to Option 750, however the remote
inhibit does not latch

Opt 0L1 Printed operating manual

Opt 0B3 Printed service manual (in English)

Accessories

1CM003A* Rack mount flange kit 132.6 mm H (3U) –
two flange brackets

1CP002A* Rack mount flange and handle kit 132.6
mm H (3U) – two brackets and front
handles

E3663AC* Support rails for Keysight rack cabinets

p/n 1494-0059 Rack slide kit

Application notes

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

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

Understanding Linear Power Supply Operation (AN1554),
5989-2291EN

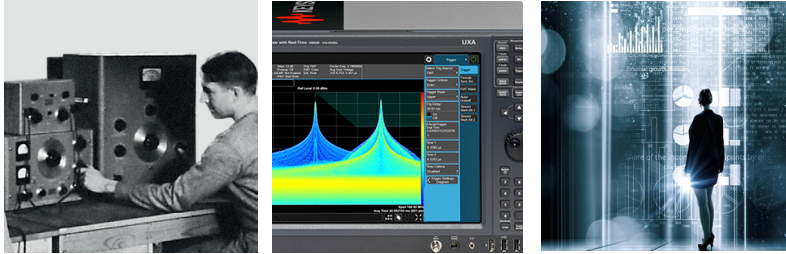
*Modern Connectivity—Using USB and LAN I/O Converters
(AN 1475-1)*, 5989-0123EN

*Support rails required

Evolving Since 1939

Our unique combination of hardware, software, services, and people can help you reach your next breakthrough. We are unlocking the future of technology.

From Hewlett-Packard to Agilent to Keysight.



For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at:

www.keysight.com/find/contactus

Americas

Canada	(877) 894 4414
Brazil	55 11 3351 7010
Mexico	001 800 254 2440
United States	(800) 829 4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 11 2626
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) 6375 8100

Europe & Middle East

Austria	0800 001122
Belgium	0800 58580
Finland	0800 523252
France	0805 980333
Germany	0800 6270999
Ireland	1800 832700
Israel	1 809 343051
Italy	800 599100
Luxembourg	+32 800 58580
Netherlands	0800 0233200
Russia	8800 5009286
Spain	800 000154
Sweden	0200 882255
Switzerland	0800 805353
	Opt. 1 (DE)
	Opt. 2 (FR)
	Opt. 3 (IT)
United Kingdom	0800 0260637

For other unlisted countries:

www.keysight.com/find/contactus
(BP-9-7-17)

DEKRA Certified
ISO 9001 Quality Management System

www.keysight.com/go/quality
Keysight Technologies, Inc.
DEKRA Certified ISO 9001:2015
Quality Management System

myKeysight

myKeysight

www.keysight.com/find/mykeysight

A personalized view into the information most relevant to you.

http://www.keysight.com/find/emt_product_registration

Register your products to get up-to-date product information and find warranty information.

KEYSIGHT SERVICES

Accelerate Technology Adoption.
Lower costs.

Keysight Services

www.keysight.com/find/service

Keysight Services can help from acquisition to renewal across your instrument's lifecycle. Our comprehensive service offerings—one-stop calibration, repair, asset management, technology refresh, consulting, training and more—helps you improve product quality and lower costs.

Keysight Assurance Plans

www.keysight.com/find/AssurancePlans

Up to ten years of protection and no budgetary surprises to ensure your instruments are operating to specification, so you can rely on accurate measurements.

Keysight Channel Partners

www.keysight.com/find/channelpartners

Get the best of both worlds: Keysight's measurement expertise and product breadth, combined with channel partner convenience.



www.keysight.com/find/6620



This information is subject to change without notice.
© Keysight Technologies, 2017
Published in USA, December 2, 2017
5990-9302EN
www.keysight.com