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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6684A DC Power Supply

Agilent Keysight 6684A 5000 W System DC Power Supply The Agilent/Keysight 6684A is a single-output 5000 W GPIB system DC power supply in the 6680A series. OEM 6680A Series datasheets list output ratings at 40 C with 1 percent perCderating to 55 C, SCPI programming, analog modulation inputs, and three-phase AC input. High-current burn-in and manufacturing test, long-term system DC bias, and ATE racks needing up to 5 kW programmable DC with GPIB. Analog voltage and current programming inputs The Agilent/Keysight 6684A is a single-output 5000 W GPIB system DC power supply in the 6680A series. OEM 6680A Series datasheets list output ratings at 40 C with 1 percent perCderating to 55 C, SCPI programming, analog modulation inputs, and three-phase AC input. High-current burn-in and manufacturing test, long-term system DC bias, and ATE racks needing up to 5 kW programmable DC with GPIB. Analog voltage and current programming inputs Serial link up to 16 supplies on one GPIB address



MODEL

**Agilent / Keysight
6684A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6684A

LISTING

<https://aumictechlabs.com/products/6684a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight 6684A is a 5120 W single-output DC power supply engineered for research, development, and automated testing environments requiring stable, precisely controlled power delivery. It combines low output ripple and noise with selectable load compensation and acoustic noise reduction through fan-speed control, while supporting direct front-panel operation or

remote command via GPIB/SCPI. Technical Specifications Electrical Performance Output: 0–40 V, 0–128 A (5120 W total) Voltage ripple and noise: 1.0 mV RMS, 10 mV peak-to-peak (20 Hz–20 MHz) Current RMS (constant voltage mode): 23 mA Programming accuracy: voltage $\pm(0.04\% + 40 \text{ mV})$, current $\pm(0.1\% + 65 \text{ mA})$ at $25 \pm 5^\circ\text{C}$ Programming resolution: 10.8 mV (voltage), 34 mA (current) Output voltage response time: 60 ms (excluding command processing) Common-mode noise current: 3 mA RMS, 20 mA peak-to-peak Over-voltage protection resolution: 225 mV Floating output: $\pm 60 \text{ VDC}$ from chassis ground Remote sensing: up to half rated voltage drop per load lead AC Input 180–235 VAC or 360–440 VAC (three-phase, 47–63 Hz) Maximum line current: 27.7 A RMS (180–235 VAC), 14.3 A RMS (360–440 VAC) Input power: 6000 W maximum, 160 W at no load Physical & Environmental Dimensions: 425.5 mm W $\times$ 221.5 mm H $\times$ 674.7 mm D Weight: 51.3 kg net Operating temperature: 0–55°C Humidity: maximum 95% non-condensing Altitude: up to 2000 m Safety Class 1; requires protective earth connection Key Features GPIB interface with IEEE 488.2 and SCPI command support Serial link capability: up to 16 units addressable through single GPIB port Multiple programming modes: front panel, SCPI commands, or analog control signals (0 to $\pm 5 \text{ V}$) Software drivers: IVI-COM and VXIplug&play Selectable compensation for inductive load stability Typical Applications Automated test environments and production verification R&D power delivery for high-current device testing Transient response and load-switching characterization Compatibility & Integration The 6684A integrates into mixed-signal test systems via GPIB, supporting IVI-COM and VXIplug&play driver architectures. Analog programming inputs enable integration with legacy measurement and control systems without dedicated communication infrastructure.

6684A Characteristics / Specifications

PARAMETER	VALUE
Model	6684A
Number Of Outputs	1
Output Voltage	0 to 40 V
Output Current At 40 C	0 to 128 A
Current Derating	1 percent perCfrom 40 C to 55 C
Power Class	5000 W series
Voltage Programming Accuracy 25 Plus Or Minus 5 C	0.04 percent plus 40 mV
Current Programming Accuracy	0.1 percent plus 65 mA
CV Ripple Noise RMS 20 Hz To 20 MHz	1.0 mV
CV Ripple Noise Peak To Peak	10 mV
Voltage Readback Accuracy	0.05 percent plus 60 mV
Current Readback Accuracy	0.1 percent plus 90 mA
Load Line Regulation Voltage	0.002 percent plus 1.5 mV
Load Line Regulation Current	0.005 percent plus 9 mA
Transient Response	less than 900 us to within 150 mV for 100 percent to 50 percent or 50 percent to 100 percent load step
AC Input Line To Line	180 to 235 Vac 3 phase or 360 to 440 Vac 47 to 63 Hz
Input Power Maximum	7350 VA and 6000 W
No Load Power	160 W
Analog Program Voltage Input	0 to minus 5 V for voltage
Analog Program Current Input	0 to plus 5 V for current
Analog Input Impedance	30 kOhm or greater
GPIB Capabilities	SH1 AH1 T6 L4 SR1 RL1 PP0 DC1 DT1 E1 C0
Command Set	IEEE-488.2 and SCPI
Series Family	Agilent 6680A 5000 W

6684A Specifications

PARAMETER	VALUE
Agilent Keysight 6684A 5000 W System DC Power Supply	Overview
Applications	High-current burn-in and manufacturing test, long-term system DC bias, and ATE racks needing up to 5 kW programmable DC with GPIB.
Key Features	5000 W single output system supply
Analog voltage and current programming inputs	Serial link up to 16 supplies on one GPIB address
Technical Specifications	Model: 6684A

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

From Agilent 6680A Series Single-Output 5000 W DC Power Supplies data sheet model column for 6684A. Confirm three-phase AC wiring and current derating at ambient above 40 C.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.