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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6683A DC Power Supply

Agilent Keysight 6683A 5000 W System DC Power Supply The Agilent/Keysight 6683A 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 6683A 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
6683A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6683A

LISTING

<https://aumictechlabs.com/products/6683a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight 6683A is a 5000 W single-output DC power supply engineered for demanding test applications requiring stable, precise power delivery. This unit combines programmable voltage and current control with exceptionally low ripple and noise, making it suitable for integration into automated test systems and benchtop configurations alike. Technical

Specifications Output Ratings Voltage: 0 to 32 V Current: 0 to 160 A Power: 5000 W Programming Accuracy (at $25 \pm 5^{\circ}\text{C}$) Voltage: $0.04\% + 32 \text{ mV}$ Current: $0.1\% + 85 \text{ mA}$ Ripple and Noise (20 Hz to 20 MHz) Voltage RMS: 1.0 mV Voltage peak-to-peak: 10 mV Average voltage: 1.35 mV Average current: 235 mA Input Power Requirements AC input: 180 to 235 VAC or 360 to 440 VAC, 3-phase, 47 to 63 Hz Maximum input power: 7350 VA No-load power consumption: 160 W maximum Physical Dimensions $425.5 \text{ mm W} \times 221.5 \text{ mm H} \times 674.7 \text{ mm D}$ Key Features Low output ripple and noise performance across the full 20 Hz to 20 MHz bandwidth Selectable compensation for inductive load operation Fan-speed control for reduced acoustic noise during extended operation Built-in measurement and monitoring capabilities Extensive protection circuitry for safe operation in demanding environments Typical Applications The 6683A supports high-power device characterization, semiconductor testing, burn-in applications, and production test environments where stable DC power and low noise are critical. Compatibility & Integration Programmable Control GPIB interface with IEEE-488.2 and SCPI command set support. Analog control available for output voltage and current. Serial operation allows up to 16 units to be addressed via a single GPIB connection. Environmental Ratings Operating altitude to 2000 m; maximum humidity 95%; Category III installation environment; Safety Class 1 with protective earth terminal. *Note: This product is obsolete and may no longer be available due to RoHS compliance requirements in certain regions.*

6683A Characteristics / Specifications

PARAMETER	VALUE
Model	6683A
Number Of Outputs	1
Output Voltage	0 to 32 V
Output Current At 40 C	0 to 160 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 32 mV
Current Programming Accuracy	0.1 percent plus 85 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 48 mV
Current Readback Accuracy	0.1 percent plus 110 mA
Load Line Regulation Voltage	0.002 percent plus 1.1 mV
Load Line Regulation Current	0.005 percent plus 12 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

6683A Specifications

PARAMETER	VALUE
Agilent Keysight 6683A 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: 6683A

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 6683A. 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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30-day returns
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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.