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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6682A DC Power Supply

Agilent Keysight 6682A 5000 W System DC Power Supply The Agilent/Keysight 6682A 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 6682A 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
6682A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6682A

LISTING

<https://aumictechlabs.com/products/6682a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 6682A is a 5 kW single-output DC power supply engineered for high-current test applications in manufacturing and laboratory environments. GPIB-programmable with SCPI command support, it delivers 0–21 V at 0–240 A with low noise performance and precision regulation. Built-in voltage and current measurement, selectable inductive load compensation,

and dual analog and digital control interfaces make it suitable for automated test systems requiring stable, repeatable power delivery.

Technical Specifications

Electrical Performance

Output voltage: 0–21 V Output current: 0–240 A Total power: 5000 W Voltage ripple and noise (20 Hz to 20 MHz): 1.5 mV RMS, 10 mV peak-to-peak Voltage programming accuracy (@ 25 ±5 °C): 0.04% + 21 mV Current programming accuracy (@ 25 ±5 °C): 0.1% + 125 mA Selectable compensation for inductive loads Fan speed control for reduced acoustic noise

Interfaces & Control

GPIO programming with SCPI command set Analog voltage and current control Serial link capability: up to 16 units per GPIO address VXIplug&play driver support

Measurements

Built-in voltage and current monitoring Protection features for device-under-test safety

Key Features

Single-output, high-current architecture optimized for demanding loads Low output ripple (1.5 mV RMS) and noise floor for sensitive circuits Dual control modes - analog signals for real-time adjustment and GPIO for automated sequences Inductive load compensation to ensure stable operation with reactive components

Typical Applications

Automated manufacturing test systems High-current device characterization and burn-in Power distribution testing and validation Electronic component development requiring precision DC sourcing

Compatibility & Integration

Member of the 668xA series (6680A, 6681A, 6682A, 6683A, 6684A). Service manual compatibility extends to 664xA, 665xA, 667xA, and 669xA series. Installation Category III rated; operates to 95% relative humidity and 2000 m altitude. Safety Class 1; requires grounded three-conductor power connection. Physical dimensions: 36 × 20 × 12 in; weight: 120 lbs.

6682A Characteristics / Specifications

PARAMETER	VALUE
Model	6682A
Number Of Outputs	1
Output Voltage	0 to 21 V
Output Current At 40 C	0 to 240 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 21 mV
Current Programming Accuracy	0.1 percent plus 125 mA
CV Ripple Noise RMS 20 Hz To 20 MHz	1.5 mV
CV Ripple Noise Peak To Peak	10 mV
Voltage Readback Accuracy	0.05 percent plus 32 mV
Current Readback Accuracy	0.1 percent plus 165 mA
Load Line Regulation Voltage	0.002 percent plus 0.65 mV
Load Line Regulation Current	0.005 percent plus 17 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

6682A Specifications

PARAMETER	VALUE
Agilent Keysight 6682A 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: 6682A

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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Model	6682A
Number Of Outputs	1
Output Voltage	0 to 21 V
Output Current At 40 C	0 to 240 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 21 mV Current Programming Accuracy: 0.1 percent plus 125 mA CV Ripple Noise RMS 20 Hz To 20 MHz: 1.5 mV	
Specifications	
PARAMETER	VALUE
CV Ripple Noise Peak To Peak	10 mV
Voltage Readback Accuracy	0.05 percent plus 32 mV
Current Readback Accuracy	0.1 percent plus 165 mA
Load Line Regulation Voltage	0.002 percent plus 0.65 mV
Load Line Regulation Current	0.005 percent plus 17 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
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Command Set	IEEE-488.2 and SCPI
Series Family	Agilent 6680A 5000 W

Notes

From Agilent 6680A Series Single-Output 5000 W DC Power Supplies data sheet model column for 6682A. 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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NIST-traceable calibration · SAM registered ·
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.