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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6642A DC Power Supply

HP Agilent 6642A System DC Power Supply 20 V 10 A The Agilent/Keysight 6642A is a 200 W single-output linear-regulated GPIB DC power supply in the 6640A series. OEM datasheet ratings are 0 to 20 V and 0 to 10 A at 40 °C with SCPI control and active downprogramming. ATE 20 V class bias at up to 10 A, production test with fast programming, and GPIB automated DC sourcing. Active downprogrammer about 20% of rated current The Agilent/Keysight 6642A is a 200 W single-output linear-regulated GPIB DC power supply in the 6640A series. OEM datasheet ratings are 0 to 20 V and 0 to 10 A at 40 °C with SCPI control and active downprogramming. ATE 20 V class bias at up to 10 A, production test with fast programming, and GPIB automated DC sourcing. Active downprogrammer about 20% of rated current Programming Accuracy Voltage: 0.06% + 10 mV at 25 °C plus or minus 5 °C



MODEL

**Agilent / Keysight
6642A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6642A

LISTING

<https://aumictechlabs.com/products/6642a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 6642A is a 200 W single-output DC power supply engineered for precision voltage and current control in R&D, manufacturing, and automated test environments. It delivers fast, low-noise power with programmable GPIB interface and SCPI command support, enabling direct integration into test systems to optimize throughput and reduce cycle times. Technical Specifications Output Ratings Voltage: 0 to 20 V Current (at 40 °C): 0 to 10 A Current (at 50 °C / 55 °C): 9 A / 8.5 A Power: 200 W Programming Accuracy (at 25 °C ± 5 °C) Voltage: ±0.06% + 10

mV Current: $\pm 0.15\%$ + 13 mA Output Ripple & Noise (20 Hz to 20 MHz) Voltage RMS: 300 μ V
Voltage peak-to-peak: 3 mV Current RMS: 5 mA Environmental Operating temperature: 0 °C to 55 °C
Key Features Fast, low-noise output delivery for optimized test performance Analog control of output voltage and current for direct signal manipulation Fan-speed control to minimize acoustic noise in lab environments Parallel and series connection capability for expanded output flexibility Advanced programmable features with built-in measurements Fast crowbar and mode crossover protection for DUT safety Multi-unit protection circuitry coordination to maximize production yield
Typical Applications Component and subsystem characterization in R&D environments Automated manufacturing test and device validation High-precision power delivery for noise-sensitive circuits Process validation and production line testing
Compatibility & Integration GPIB Interface SCPI (Standard Commands for Programmable Instruments) support VXIplug&play driver availability for test system integration Up to 16 units addressable on a single GPIB connection via serial link Control Options Programmable digital control via GPIB Analog control for immediate response to dynamic requirements Safety Class 1 instrument with protective earth ground terminal Three-conductor AC mains connection required

6642A Characteristics / Specifications

PARAMETER	VALUE
Number of Outputs	1
GPIO	Yes
Output Voltage Rating	0 to 20 V
Output Current Rating At 40 C	0 to 10 A
Maximum Current At 50 C	9 A
Maximum Current At 55 C	8.5 A
Programming Accuracy Voltage	0.06% + 10 mV at 25 C plus or minus 5 C
Programming Accuracy Current	0.15% + 13 mA at 25 C plus or minus 5 C
Ripple Voltage RMS	300 uV (20 Hz to 20 MHz)
Ripple Voltage Peak to Peak	3 mV
Ripple Current RMS	5 mA
Readback Accuracy Voltage	0.07% + 15 mV
Readback Accuracy Positive Current	0.15% + 9.1 mA
Readback Accuracy Negative Current	0.35% + 20 mA
Load Regulation Voltage	2 mV
Load Regulation Current	0.5 mA
Line Regulation Voltage	0.5 mV
Line Regulation Current	0.5 mA
Transient Response Time	less than 100 us for up to 50% current step
Programming Resolution Voltage	5 mV
Programming Resolution Current	3 mA
OVP Resolution	30 mV
OVP Accuracy	400 mV
Output Rise Fall Time	less than 15 ms
Output Settle Time	less than 60 ms to 1 LSB

PARAMETER	VALUE
Downprogrammer Sink Class	approximately 20% of rated current
Analog Program Input	0 to minus 5 V
Analog Program Impedance	10 kOhm nominal
Command Processing Time	20 ms average on GPIB
Output Terminal Isolation	plus or minus 240 Vdc from chassis ground
AC Input Power Full Load	480 VA, 400 W
Size	425.5 mmWx 88.1 mmHx 439 mmDNet Weight: 14.2 kg (31.4 lb)

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
Specs from Agilent 6640A Series data sheet column for 6642A.

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
NAICS 423690 · 811210 · 541380
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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.