

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 1, 2026

HP / AGILENT

HP Agilent 6654A DC Power Supply

HP / Agilent 6654A DC Power Supply, 0-60 V, 0-9 A, 500 W Class The HP / Agilent 6654A is a single-output, series-pass regulated DC power supply in the 665xA 500 W GPIB family. It provides 0 to 60 V and 0 to 9 A (at 40 C) with built-in GPIB/SCPI programming, readback of measured voltage and current, and analog programming capability. Up to 16 supplies can share one GPIB interface via a serial link connection. ATE and automated production test, laboratory bench power, burn-in, and system power where programmable 60 V / 9 A class DC with remote sensing and GPIB control is required. The HP / Agilent 6654A is a single-output, series-pass regulated DC power supply in the 665xA 500 W GPIB family. It provides 0 to 60 V and 0 to 9 A (at 40 C) with built-in GPIB/SCPI programming, readback of measured voltage and current, and analog programming capability. Up to 16 supplies can share one GPIB interface via a serial link connection. ATE and automated production test, laboratory bench power, burn-in, and system power where programmable 60 V / 9 A class DC with remote sensing and GPIB control is required.



MODEL

HP / Agilent 6654A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

6654A

LISTING

<https://aumictechlabs.com/products/6654a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The HP Agilent 6654A is a 500 W single-output DC power supply engineered for design, manufacturing, and laboratory testing environments. It delivers 0-60 V DC at 0-9 A (40°C rating) with programmable voltage and current control via GPIB/SCPI commands and analog remote

programming. The 6650 series architecture emphasizes fast programming response - output voltage settles within 60 ms - and transient recovery under 100 μ s, maximizing test throughput in production and R&D applications.

Technical Specifications

Output Ratings Voltage: 0–60 V DC
Current: 0–9 A @ 40°C; 8.1 A @ 50°C; 7.7 A @ 55°C
Maximum Power: 500 W

Programming Accuracy (25°C $\pm$ 5°C) Voltage: 0.06% + 26 mV
Current: 0.15% + 8 mA

Ripple & Noise (20 Hz–20 MHz) Voltage RMS: 500 μ V
Voltage Peak-to-Peak: 5 mV
Current RMS: 3 mA

Regulation Performance Load Regulation (Voltage): 4 mV (0–100% load)
Load Regulation (Current): 0.5 mA (0–100% load)
Line Regulation (Voltage): 0.5 mV

Metering Accuracy Voltmeter: 40 mV
Ammeter: 7 mA

Response Characteristics Transient Recovery: <100 μ s
Output Programming Rise/Fall Time (10/90%, 90/10%): <15 ms
Settling to $\pm$ 1 LSB: <60 ms

Key Features Programmable over-voltage and over-current protection with fast crowbar action
Over-temperature protection and mode crossover safeguards
Analog control input for remote voltage and current adjustment
GPIB with SCPI command set; serial link capability for up to 16 units at one address
Auto-parallel operation: up to three units; series or parallel output connection supported
Discrete Fault Indicator/Remote Inhibit (DFI/RI) control
User-definable power-on state and self-test via GPIB
Fan-speed control for acoustic noise reduction
Available in 100 VAC, 120 VAC, 220 VAC, and 240 VAC input configurations (47–63 Hz)

Typical Applications Component and subsystem characterization
Production test and burn-in
Power conversion and amplifier verification
Battery simulation and charging profiles

Compatibility & Integration Member of the Agilent 6650A series. VXI Plug&Play drivers available. Approximate weight: 20 kg.

Features & description

From manufacturer datasheet

Features

- Single output: 0 to 60 V, 0 to 9 A (40 C) • Approximately 540 W class rating (60 V x 9 A) • Internal GPIB with SCPI programming • Voltage and current programming with measured-value readback • Series-pass regulation for low noise • Remote sensing; overvoltage and overcurrent protection features of the 665xA series • Analog programming of voltage and current • Serial link for multi-supply GPIB sharing (up to 16 units)

6654A Characteristics / Specifications

PARAMETER	VALUE
Model	6654A
Manufacturer	Hewlett-Packard / Agilent / Keysight
Instrument Type	Single-output programmable DC power supply
Number of Outputs	1
GPIO	Yes Output Ratings
Output Voltage	0 to 60 V
Output Current (40 C)	0 to 9 A
Maximum Current (50 C / 55 C)	8.1 A / 7.7 A Programming Accuracy (25 C +/-5 C)
Voltage	0.07% + 40 mV +Current: 0.15% + 7 mA -Current: 0.35% + 15 mA Load Regulation
Current	0.5 mA Transient Response Less than 100 us for output voltage to recover within 0.1% of rating or 20 mV (whichever greater) after up to 50% rated current load step (series specification) Operational Notes Derate current at elevated ambient temperatures per the 50 C / 55 C ratings. Use remote sense for accurate voltage at the load. Observe polarity and sense lead connections. GPIO address and serial-link cabling follow 665xA user manual practices.
Voltage rms	500 uV
Current rms	3 mA Readback Accuracy (25 C +/-5 C)
Single output	0 to 60 V, 0 to 9 A (40 C)

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	
Specifications	
PARAMETER	VALUE
Model	6654A
Manufacturer	Hewlett-Packard / Agilent / Keysight
Instrument Type	Single-output programmable DC power supply
Number of Outputs	1
GPIB	Yes
Output Ratings	
Specifications	
PARAMETER	VALUE
Output Voltage	0 to 60 V
Output Current (40 C)	0 to 9 A
Maximum Current (50 C / 55 C)	8.1 A / 7.7 A
Programming Accuracy (25 C +/-5 C)	
Voltage: 0.06% + 26 mV	
Current: 0.15% + 8 mA	
Ripple and Noise (20 Hz to 20 MHz)	
Voltage rms: 500 uV	
Voltage peak-to-peak: 5 mV	
Current rms: 3 mA	
Readback Accuracy (25 C +/-5 C)	
Voltage: 0.07% + 40 mV	
+Current: 0.15% + 7 mA	
-Current: 0.35% + 15 mA	
Load Regulation	
Voltage: 4 mV	
Current: 0.5 mA	
Line Regulation	
Voltage: 1 mV	
Current: 0.5 mA	
Transient Response	
Less than 100 us for output voltage to recover within 0.1% of rating or 20 mV (whichever greater) after up to 50% rated current load step (series specification)	
Operational Notes	
Derate current at elevated ambient temperatures per the 50 C / 55 C ratings. Use remote sense for accurate	

voltage at the load. Observe polarity and sense lead connections. GPIB address and serial-link cabling follow 665xA user manual practices.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 1, 2026

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