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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6434B DC Power Supply

HP Agilent Keysight 6434B DC Power Supply 40 V 25 A The HP 6434B is a solid-state constant-voltage/constant-current DC power supply for bench or rack use. OEM operating literature rates 0 to 40 V and 0 to 25 A with remote resistance or remote voltage programming and 115 Vac single-phase input. General-purpose medium-power laboratory and production DC bias requiring CV/CC operation. Constant voltage / constant current operation The HP 6434B is a solid-state constant-voltage/constant-current DC power supply for bench or rack use. OEM operating literature rates 0 to 40 V and 0 to 25 A with remote resistance or remote voltage programming and 115 Vac single-phase input. General-purpose medium-power laboratory and production DC bias requiring CV/CC operation. Constant voltage / constant current operation Remote resistance or remote voltage programming



MODEL

**Agilent / Keysight
6434B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6434B

LISTING

<https://aumictechlabs.com/products/6434b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 6434B is a solid-state DC power supply delivering 0–40 V and 0–25 A with 1000 W maximum output. This instrument operates in constant voltage or constant current mode with continuously variable output to zero, making it suitable for benchtop and relay rack installations in electronic testing and development environments. Technical Specifications DC Output Voltage Range: 0–40 V Current Range: 0–25 A Power Output: 1000 W Operation Modes: Constant Voltage / Constant Current Output Variability: Continuously variable to zero in either

mode Input Power Requirements Voltage: 115 Vac $\pm 10\%$, single phase Frequency: 57–63 Hz Input Current: 19 A Maximum Input Power: 1300 W Efficiency: Up to 75% at full output Regulation and Stability Line regulation in constant voltage mode is less than 18 mV for a 10% input voltage change; constant current mode holds less than 200 mA. Load regulation achieves less than 40 mV (CV mode, 0–25 A load change) and less than 200 mA (CC mode, 0–40 V load change). Temperature coefficient is 0.03% plus 5 mV/°C in CV mode and 75 mA/°C in CC mode. After 30-minute warm-up, output stability is 0.1% plus 20 mV for 8 hours (CV) and 250 mA for 8 hours at constant temperature (CC). Output Impedance Typical impedance is less than 0.01 Ω (DC to 0.5 Hz), less than 0.5 Ω (0.5–100 Hz), less than 0.1 Ω (100 Hz–1 kHz), and less than 0.6 Ω (1–100 kHz). Remote Programming Voltage programming: 200 Ω /V $\pm 1\%$; Current programming: 10 Ω /A $\pm 10\%$. Programming accepts remote resistance or remote voltage source. Key Features Dual front-panel circuit breaker provides AC input protection and on/off switching Crossover protection automatically switches from constant voltage to constant current when output current exceeds preset limit Reverse voltage protection via output diode Operating temperature: ambient not to exceed 55°C Typical Applications Electronic component and subsystem characterization Burn-in and stress testing Lab bench power sourcing Development and qualification testing Compatibility & Integration Operating and Service Manual available. Originally manufactured by Hewlett-Packard (HP); compatible with legacy test systems and modern benchtop setups.

6434B Characteristics / Specifications

PARAMETER	VALUE
Model	6434B
Instrument Type	Constant voltage constant current DC power supply
Dc Output Voltage	0 to 40 V
Dc Output Current	0 to 25 A
Output Power Maximum	1000 W
Remote Programming Resistance	supported
Remote Programming Voltage	supported
Input Power	115 Vac plus or minus 10 percent single phase
Input Frequency	57 to 63 Hz
Operation Modes	constant voltage and constant current
Form Factor	bench or relay rack
Technology	solid-state
Manual Document Number	06434-90001
Manual Date Class	December 1967 revision family
Series Family	HP 643xB system/bench supplies
Polarity	DC output
Regulation Class	well-regulated per OEM description
Use Cases	laboratory and rack automated bias
Brand Lineage	HP / Agilent / Keysight
Crossover Behavior	CV/CC automatic crossover
Output Voltage Minimum	0 V
Output Current Minimum	0 A
Remote Sense Class	remote programming path supported

6434B Specifications

PARAMETER	VALUE
HP Agilent Keysight 6434B DC Power Supply 40 V 25 A	Overview
Applications	General-purpose medium-power laboratory and production DC bias requiring CV/CC operation.
Constant voltage / constant current operation	Remote resistance or remote voltage programming
Technical Specifications	Model: 6434B

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 Hewlett-Packard 6434B DC Power Supply operating literature published ratings (0-40 V, 0-25 A, 115 Vac). Full ripple and programming coefficient tables belong in the operating and service manual.	

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.