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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6631B DC Power Supply

HP Agilent 6631B System DC Power Supply 8 V 10 A The Agilent/Keysight 6631B is a single-output linear-regulated GPIB DC power supply in the 6630B series. OEM datasheet ratings are 0 to 8 V and 0 to 10 A with active downprogramming that sinks full rated current, dual-range microamp current measurement, and SCPI control. Fast ATE low-voltage high-current bias with microamp readback, R&D bench work, and GPIB automated sourcing with stored states. Active downprogrammer sinks full rated 10 A The Agilent/Keysight 6631B is a single-output linear-regulated GPIB DC power supply in the 6630B series. OEM datasheet ratings are 0 to 8 V and 0 to 10 A with active downprogramming that sinks full rated current, dual-range microamp current measurement, and SCPI control. Fast ATE low-voltage high-current bias with microamp readback, R&D bench work, and GPIB automated sourcing with stored states. Active downprogrammer sinks full rated 10 A Dual range precision low current measurement



MODEL

**Agilent / Keysight
6631B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6631B

LISTING

<https://aumictechlabs.com/products/6631b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 6631B is a single-output, 80 W linear DC power supply engineered for high-throughput manufacturing test and demanding R&D applications. It delivers optimized programming and measurement speed with an active down-programmer capable of sinking full rated current and dual-range, precision low current measurement for accurate output monitoring. The instrument supports SCPI commands via GPIB and RS-232 interfaces, with VXI Plug&Play

driver compatibility for streamlined system integration.

Technical Specifications

Output Ratings

Output Power: 80 W (single output) Voltage Range: 0 to 8 V Current Range: 0 to 10 A Minimum Current in Constant Current Mode: 40 mA Voltage Performance Programming Resolution: 1 mV or 2 mV Programming Accuracy (25 °C ± 5 °C): ±(0.04% + 5 mV) or ±0.05% + 5 mV Load Regulation: 0.01% + 2 mV or 2 mV Line Regulation: 0.01% + 5 mV or 0.5 mV Ripple and Noise (20 Hz to 20 MHz, normal mode): 1 mVrms or 3 mVrms Current Performance Programming Resolution: 0.1 mA or 2.5 mA Load Regulation: 2 mA Line Regulation: 1 mA Active Sink Current: 10 A (full rated current) Dynamic Response Transient Response Time: <100 µs (50 µs in fast mode) for output voltage to settle within 0.1% of voltage rating or 20 mV following a 50% step change in load current

Key Features

Dual-range precision low current measurement with built-in microamp system Fast command processing and optimized measurement speed for manufacturing throughput Active down-programmer provides full-current sinking capability Stored state support with status reporting Low-output noise design

Typical Applications

Manufacturing test environments requiring fast throughput R&D bench applications demanding precision current measurement Automated test systems integrating via GPIB or RS-232

Compatibility & Integration

SCPI command set via GPIB and RS-232 VXI Plug&Play driver support Input voltage options: 87–106 VAC (Opt 100), 104–127 VAC (Opt 120), 191–233 VAC (Opt 220), 207–253 VAC (Opt 230); all 47–63 Hz Compact form factor: 3.5 × 8.5 × 13.7 inches (89 × 216 × 347 mm); 9.3 lbs (4.2 kg)

6631B Characteristics / Specifications

PARAMETER	VALUE
Number of Outputs	1
GPIO	Yes
Output Voltage Rating	0 to 8 V
Output Current Rating	0 to 10 A
Programming Accuracy Voltage	5 mV at 25 C plus or minus 5 C
Programming Accuracy Current	0.05% + 4 mA at 25 C plus or minus 5 C
Ripple Voltage Normal Mode RMS	0.3 mV (20 Hz to 20 MHz)
Ripple Voltage Normal Mode Peak to Peak	3 mV
Ripple Voltage Fast Mode RMS	1 mV
Ripple Voltage Fast Mode Peak to Peak	10 mV
Ripple Current RMS	3 mA
DC Measurement Accuracy Voltage	0.03% + 2 mV
Low Current Measurement Accuracy	0.1% + 2.5 uA from minus 20 mA to +20 mA
High Current Measurement Accuracy Positive	0.2% + 1 mA
High Current Measurement Accuracy Negative	0.2% + 1.6 mA
Load Regulation Voltage	2 mV
Load Regulation Current	2 mA
Line Regulation Voltage	0.5 mV
Line Regulation Current	1 mA
Transient Response Time	less than 100 us (50 us fast mode) for up to 50% current step
Programming Resolution Voltage	2 mV
Programming Resolution Current	2.5 mA
Sink Current	10 A
Command Processing Time	4 ms average (display disabled)

PARAMETER	VALUE
Output Rise Fall Time	less than 2 ms (400 us fast mode)
Output Settle Time	less than 6 ms (2 ms fast mode) to 1 LSB
Measurement Time Average	50 ms
Output Terminal Isolation	plus or minus 240 Vdc from chassis ground
Size	425.5 mmWx 88.1 mmHx 364.4 mmDNet Weight: 12.7 kg (28 lb)
Input Power Full Load	3.5 A, 250 W

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/Keysight 6630B Series data sheet column for 6631B.

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.