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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6031A System Autoranging DC Power Supply, 20V, 120A

HP Agilent 6031A Autoranging System DC Power Supply The Agilent 6031A is the high-current member of the 603xA autoranging GPIB family, rated 0 to 20 V and 0 to 120 A with 1064 W maximum power. Autoranging corners provide 20 V/50 A, 14 V/76 A, and 7 V/120 A operating points for low-voltage high-current ATE loads. High-current device and board bias, burn-in of low-voltage high-current loads, and system DC sources needing autoranging flexibility under GPIB control. Built-in measurements and protection features The Agilent 6031A is the high-current member of the 603xA autoranging GPIB family, rated 0 to 20 V and 0 to 120 A with 1064 W maximum power. Autoranging corners provide 20 V/50 A, 14 V/76 A, and 7 V/120 A operating points for low-voltage high-current ATE loads. High-current device and board bias, burn-in of low-voltage high-current loads, and system DC sources needing autoranging flexibility under GPIB control. Built-in measurements and protection features Analog programming 0 to 5 V or 0 to 4 kohm



MODEL

**Agilent / Keysight
6031A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6031A

LISTING

<https://aumictechlabs.com/products/6031a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 6031A is a single-output, 1064 W autoranging DC power supply delivering 0–20 V at 0–120 A. Built for demanding test systems, it combines analog/resistance voltage and

current control with full programmability via HP-IB and SCPI, enabling flexible integration into multi-unit configurations. The autoranging architecture maximizes power delivery across the entire operating range, eliminating the need for multiple supplies and reducing rack footprint.

Technical Specifications

Output Ratings Voltage: 0 to 20 V Current: 0 to 120 A Power: 1064 W Performance (at 25°C ±5°C) Voltage programming accuracy: 0.035% + 15 mV Voltage readback accuracy: 0.08% + 7 mV Current programming accuracy: 0.25% + 250 mA Current readback accuracy: 0.4% + 100 mA Voltage ripple & noise (20 Hz–20 MHz): 8 mV RMS, 50 mV peak-to-peak Current noise (20 Hz–20 MHz): 120 mA RMS

Input & Environment AC input: 100 VAC (±6%, –10%), 120 VAC (±6%, –13%), 220 VAC (±6%, –13%), 240 VAC (±6%, –13%) Operating altitude: Up to 2000 m Maximum relative humidity: 95% Acoustic noise: < 70 dB(A) Weight: 16.3 kg

Key Features Autoranging capability for optimal power efficiency across all operating points Overvoltage and overcurrent protection with foldback limiting Built-in output voltage and current measurements LED status indicators and self-test diagnostics Remote sensing Series and auto-parallel connection support for multiple units Safety Class 1 with protective earth terminal

Typical Applications High-current device characterization and stress testing Burn-in and life testing Battery charging and electrochemical test systems Power-hungry component validation

Compatibility & Integration GPIB (IEEE-488) interface supporting up to 16 power supplies per address HP-IB programmable voltage and current control SCPI command set compliance VXI Plug&Play drivers for straightforward system integration

Features & description

From manufacturer datasheet

Built-in measurements and protection features

Analog programming 0 to 5 V or 0 to 4 kohm Serial link for up to 16 supplies on one GPIB address Same mechanical outline as other 1000 W 603xA models Technical Specifications Number of Outputs: 1 GPIB: Yes Output Voltage: 0 to 20 V Output Current: 0 to 120 A Maximum Power: 1064 W Autoranging Corner V1 I1: 20 V, 50 A Autoranging Corner V2 I2: 14 V, 76 A Autoranging Corner V3 I3: 7 V, 120 A Programming Accuracy Voltage 25±5 C: 0.035% + 15 mV Programming Accuracy Current: 0.25% + 250 mA Ripple Voltage RMS: 8 mV Ripple Voltage Peak to Peak: 50 mV Ripple Current RMS: 120 mA Readback Accuracy Voltage: 0.08% + 7 mV Readback Accuracy Current: 0.4% + 100 mA Load Regulation Voltage: 3 mV Load Regulation Current: 0.01% + 15 mA Programming Resolution Voltage: 5 mV Programming Resolution Current: 30 mA DC Floating Voltage: ±240 V Transient Response Time: 2 ms Transient Response Level: 100 mV Size: 425.5 mmWx 132.6 mmHx 503.7 mmDNet Weight: 17.2 kg (38 lb) Notes Specs from Agilent 6030A Series data sheet column for 6031A. Confirm sense-lead and paralleling practices in the operating manual for high-current setups.

6031A Characteristics / Specifications

PARAMETER	VALUE
Number of Outputs	1
GPIB	Yes
Output Voltage	0 to 20 V
Output Current	0 to 120 A
Maximum Power	1064 W
Autoranging Corner V1 I	20 V, 50 A
Autoranging Corner V2 I	14 V, 76 A
Autoranging Corner V3 I	7 V, 120 A
Programming Accuracy Current	0.25% + 250 mA
Ripple Voltage RMS	8 mV
Ripple Voltage Peak to Peak	50 mV
Ripple Current RMS	120 mA
Readback Accuracy Voltage	0.08% + 7 mV
Readback Accuracy Current	0.4% + 100 mA
Load Regulation Voltage	3 mV
Load Regulation Current	0.01% + 15 mA
Programming Resolution Voltage	5 mV
Programming Resolution Current	30 mA
DC Floating Voltage	±240 V
Transient Response Time	2 ms
Transient Response Level	100 mV
Size	425.5 mmWx 132.6 mmHx 503.7 mmDNet Weight: 17.2 kg (38 lb)

6031A Specifications

PARAMETER	VALUE
HP Agilent 6031A Autoranging System DC Power Supply	Overview
Analog programming 0 to 5 V or 0 to 4 kohm	Serial link for up to 16 supplies on one GPIB address
Technical Specifications	Number of Outputs: 1

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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Readback Accuracy Voltage	0.08% + 7 mV
Readback Accuracy Current	0.4% + 100 mA
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Autorangeing Corner V1 I1	20 V, 50 A
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Autorangeing Corner V3 I3	7 V, 120 A

Programming Accuracy Voltage 25±5 C: 0.035% + 15 mV

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Notes
Specs from Agilent 6030A Series data sheet column for 6031A. Confirm sense-lead and paralleling practices in the operating manual for high-current setups.

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.