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Data Sheet
August 12, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N6954A Advanced Power System – DC Power Supply, 80 V, 12.5 A, 1000 W

Keysight / Agilent N6954A Advanced Power System DC Power Supply The N6954A is an APS N6900-series 1 kW system DC power supply: 0–80 V / 12.5 A. VersaPower architecture with high-accuracy V/I measurement; optional digitizing, low-current ranges, and arb via options. The N6954A is an APS N6900-series 1 kW system DC power supply: 0–80 V / 12.5 A. VersaPower architecture with high-accuracy V/I measurement; optional digitizing, low-current ranges, and arb via options.

MODEL Keysight / Agilent N6954A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU N6954A	LISTING https://aumictechlabs.com/products/n6954a-2/

NIST-traceable cal · SAM registered · 30-day returns · NAICS 423690 · 811210 · 541380

This unit

The Keysight N6954A Advanced Power System is a single-output programmable DC power supply delivering 1000 W across 0–80 V and 0–12.5 A. Built on VersaPower architecture, this 1U rack-mount unit combines fast transient response, high measurement resolution, and flexible control interfaces for demanding automated test applications.Technical Specifications Output: 0–80 V DC, 0–12.5 A DC Power Rating: 1000 W Voltage Programming Resolution: 14 bits Current Programming Resolution: 14 bits Voltage Measurement Resolution: 18 bits Current Measurement Resolution: 18 bits Voltage Accuracy: ±0.05% of full scale Current Accuracy: ±0.1% of full scale

Residual Ripple: < 9 mVs Voltage Slew Rate: 3 ms (up/down) Transient Settling Time: 100 µs Command Processing Speed: < 2 ms Programming Speed: Up to 500 µs Input Voltage: 240 VAC Form Factor: 1U rack mount Dimensions: 426.9 mm W × 44.45 mm H × 568.7 mm D Weight: 10.9 kgKey Features Two-quadrant operation with standard 10% current sinking; full 100% two-quadrant capability with optional N7909A dissipater unit Programmable waveforms and ± current waveform capability for complex test sequences Parallel operation up to 10 kW with equal current sharing across multiple units High-resolution LCD display Overvoltage, overcurrent, and overtemperature protection Test speeds up to 100x faster than standard supplies Measurement rate adjustable for speed/accuracy optimizationInterfaces & Integration GPIB (IEEE-488), LAN (LXI-Core), USB LXI-compliant architectureOptional Enhancement Packages 301 Accuracy Package: Higher resolution and dual measurement ranges with full calibration 302 Measurement Package: External data logging and digitizers with programmable sample rates 303 ARBs Enhancement Package: Output list and arbitrary function capability

Features & description

From manufacturer datasheet

Features

• Voltage: 0 to 80 V • Current: 0 to 12.5 A • Power: 1000 W (1 kW) • Current sink @10%: −1.25 A; @100% (with N7909A class): −12.5 A • CV ripple rms: 1 mV; CV p-p: 9 mV • Load regulation V: 2 mV; I: 0.8 mA • V program/measure accuracy: 0.03% + 12 mV • I program/measure accuracy: 0.1% + 4 mA (0.04% + 2 mA with Opt 301) • Transient recovery: 100 µs; settling band 200 mV class • Digitizer: 18-bit current digitizer up to 200 kS/s (family; Opt 302) • Measurement range Opt 301: high/low seamless current ranges • Interfaces: GPIB, USB, LAN (LXI); front-panel control • Output disconnect relays with Opt 760/761 (polarity reversal N/A on some siblings)

Applications

• ATE power sourcing to 80 V / 1 kW • Accurate simultaneousVandImeasurement • Parallel operation and two-quadrant sinking (10% std; 100% with dissipater)

N6954A Characteristics / Specifications

PARAMETER	VALUE
Model	N6954A
Manufacturer	Keysight / Agilent
Instrument Type	Advanced Power System DC Power Supply
Alias	N6954A; Keysight N6954A
Voltage	0 to 80 V
Current	0 to 12.5 A
Power	1000 W (1 kW)
CV ripple rms	1 mV; CV p-p: 9 mV
Load regulation V	2 mVVaccuracy: 0.03% + 12 mVIaccuracy: 0.1% + 4 mA
Transient recovery	100 µs Notes Specs from Keysight Advanced Power System N6900/N7900 Series data sheet (N6954A / 80 V column). Confirm options 301/302/303 on the unit.
Current sink @10%	−1.25 A; @100% (with N7909A class): −12.5 A
V program/measure accuracy	0.03% + 12 mV
I program/measure accuracy	0.1% + 4 mA (0.04% + 2 mA with Opt 301)
Digitizer	18-bit current digitizer up to 200 kS/s (family; Opt 302)
Measurement range Opt 301	high/low seamless current ranges
Interfaces	GPIB, USB, LAN (LXI); front-panel control

N6954A Specifications

PARAMETER	VALUE
Applications	- ATE power sourcing to 80 V / 1 kW
Key Features	- Voltage: 0 to 80 V
Technical Specifications	Model: N6954A
Notes	Specs from Keysight Advanced Power System N6900/N7900 Series data sheet (N6954A / 80 V column). Confirm options 301/302/303 on the unit.

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	N6954A
Manufacturer	Keysight / Agilent
Instrument Type	Advanced Power System DC Power Supply
Alias	N6954A; Keysight N6954A

Specifications

PARAMETER	VALUE
Voltage	0–80 V
Current	0–12.5 A
Power	1000 W
CV ripple rms	1 mV

CV ripple p-p: 9 mV
Load regulation V: 2 mVVaccuracy: 0.03% + 12 mVIaccuracy: 0.1% + 4 mA
Transient recovery: 100 µs

Notes
Specs from Keysight Advanced Power System N6900/N7900 Series data sheet (N6954A / 80 V column). Confirm options 301/302/303 on the unit.

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

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