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Data Sheet

August 5, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N7971A Advanced Power System – Dynamic DC Power Supply, 20 V, 100 A, 2000 W

Keysight (Agilent) N7971A Advanced Power System – Dynamic DC Power Supply, 20 V, 100 A, 2000 W The Keysight N7971A is an N7900 Series Advanced Power System dynamic DC power supply rated 0–20 V / 0–100 A / 2 kW in a 2U footprint. High-speed dynamic sourcing and measurement for ATE. Standalone sink to 10% (–10 A); with N7909A dissipater, full 100% sink (–100 A). GPIB/LAN (LXI)/USB; paralleling to 10 kW. High-speed low-voltage high-current ATE; continuous source/sink; power-storage profiling. The Keysight N7971A is an N7900 Series Advanced Power System dynamic DC power supply rated 0–20 V / 0–100 A / 2 kW in a 2U footprint. High-speed dynamic sourcing and measurement for ATE. Standalone sink to 10% (–10 A); with N7909A dissipater, full 100% sink (–100 A). GPIB/LAN (LXI)/USB; paralleling to 10 kW. High-speed low-voltage high-current ATE; continuous source/sink; power-storage profiling.



MODEL Keysight / Agilent N7971A	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU N7971A	LISTING https://aumictechlabs.com/products/n7971a-2/

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N7971A Advanced Power System is a 2000 W dynamic DC power supply engineered for high-speed automated test equipment applications. Delivering 20 V at 100 A with programming

speeds as fast as 500 μ s and command processing under 2 ms, it achieves up to 100x faster test throughput than standard power supplies. The unit combines high-precision sourcing - 14-bit voltage and 16-bit current programming - with DMM-grade measurement accuracy of 18-bit resolution on both voltage and current. Two-quadrant operation enables seamless transitions between positive and negative current for battery and energy storage testing. Built-in paralleling supports multiple units up to 10 kW with equal current sharing, while programmable output resistance simulates battery internal impedance. Advanced triggering accelerates test throughput and protects the device under test.

Technical Specifications

Output Power: 2000 W
Output Voltage: 20 V nominal; range selector 20–29.9 V
Output Current: 100 A nominal; range selector 100–199 A
Input Voltage: 240 VAC
Programming Precision: 14-bit voltage, 16-bit current
Measurement Precision: 18-bit voltage and current
Programming Speed: Up to 500 μ s
voltage/current transitions; command processing < 2 ms
Test Throughput: Up to 100x faster than standard supplies
Two-Quadrant Capability: 10% rated current standalone; full operation with optional N7909A dissipater unit(s)
Paralleling: Up to 10 kW with three-wire connection and equal current sharing

Key Features

- Dual voltage and current measurements with power, peak power, watt hour, and amp hour calculations
- Adjustable measurement rate balancing speed and accuracy
- Programmable output resistance for battery simulation
- Smart triggering system for test acceleration and DUT protection
- Single output, rack-mount configuration
- GPIB, USB, and LAN programming interfaces
- LCD display

Optional Accessories

- N7908A Black Box Recorder for measurement data and event logging
- N7909A Power Dissipater Unit for full two-quadrant operation
- N7971A-760 output disconnect and polarity reversal relays
- 14585A Power Supply Control and Analysis Software

Compatibility & Integration

BenchVue software support enables PC-based control, parameter configuration, and automated test building without programming.

Features & description

From manufacturer datasheet

Features

• 0–20 V / 0–100 A / 2,000 W • Current sink: –10 A (10%); –100 A with N7909A • Dynamic N7900 Series • Dual V/I measurement; power / Wh / Ah • 2U full-rack; parallel to 10 kW • Interfaces: GPIB, LAN (LXI-Core), USB

N7971A Characteristics / Specifications

PARAMETER	VALUE
Keysight (Agilent) N7971A Advanced Power System	Dynamic DC Power Supply, 20 V, 100 A, 2000 W Overview The Keysight N7971A is an N7900 Series Advanced Power System dynamic DC power supply rated 0–20 V / 0–100 A / 2 kW in a 2U footprint. High-speed dynamic sourcing and measurement for ATE. Standalone sink to 10% (–10 A); with N7909A dissipater, full 100% sink (–100 A). GPIB/LAN (LXI)/USB; paralleling to 10 kW.
Model	N7971A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Advanced Power System Dynamic DC Power Supply
Family	N7900 Series APS (2 kW)
Alias	N7971A; N7971A APS DC Output
Voltage	0 to 20 V
Current	0 to 100 A
Power	2,000 W
Current sink	–10 A (10%); –100 A with N7909A
Interfaces	GPIB, LAN (LXI-Core), USB

N7971A Specifications

PARAMETER	VALUE
Applications	High-speed low-voltage high-current ATE; continuous source/sink; power-storage profiling.
Key Features	- 0–20 V / 0–100 A / 2,000 W
Technical Specifications	Model: N7971A
DC Output	Voltage: 0 to 20 V
Performance	Per APS N7900 datasheet 5991-2698 N7971A (20 V / 2 kW) column
Operational Notes	N6971A is the N6900 twin. Prefer Keysight APS datasheet 5991-2698.

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	N7971A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Advanced Power System Dynamic DC Power Supply
Family	N7900 Series APS (2 kW)
Alias	N7971A; N7971A APS

DC Output

Specifications

PARAMETER	VALUE
Voltage	0 to 20 V
Current	0 to 100 A
Power	2,000 W

Current sink @10%: -10 A
Current sink @100% (with N7909A): -100 A

Performance
Per APS N7900 datasheet 5991-2698 N7971A (20 V / 2 kW) column

Operational Notes
N6971A is the N6900 twin. Prefer Keysight APS datasheet 5991-2698.

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.