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Data Sheet

August 5, 2026

KEYSIGHT / AGILENT

Keysight (Agilent) N8954A Autoranging System DC Power Supply, 500 V, 90 A, 15000 W

Keysight (Agilent) N8954A Autoranging System DC Power Supply, 500 V, 90 A, 15000 W The Keysight N8954A is an N8900 Series autoranging system DC power supply (400 VAC) rated 500 V / 90 A / 15 kW. Autoranging supports combinations such as 500 V @ 30 A and 166.7 V @ 90 A at full power. Built-in V/I measurement; LAN/USB/GPIB/analog; LXI Core; 3U. High-voltage ATE on 400 Vac; autoranging system DC; parallel multi-unit banks. The Keysight N8954A is an N8900 Series autoranging system DC power supply (400 VAC) rated 500 V / 90 A / 15 kW. Autoranging supports combinations such as 500 V @ 30 A and 166.7 V @ 90 A at full power. Built-in V/I measurement; LAN/USB/GPIB/analog; LXI Core; 3U. High-voltage ATE on 400 Vac; autoranging system DC; parallel multi-unit banks.



MODEL

**Keysight / Agilent
N8954A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N8954A

LISTING

<https://aumictechlabs.com/products/n8954a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight N8954A is a 15 kW autoranging system DC power supply delivering 0–500 V and 0–90 A in a single-output, 3U rackmount chassis. Unlike conventional supplies limited to one voltage-current combination at full power, the N8954A autoranging architecture enables multiple operating points across its full 15,000 W range, functioning as multiple supplies in one unit. Fully

programmable with integrated voltage and current measurement, it accepts 360–440 VAC input (nominal 400 VAC) and integrates over-voltage, over-current, and over-temperature protection. The supply connects via LAN (LXI Core), USB, GPIB, and analog interfaces, with a built-in web server enabling remote browser-based control. Operating range spans 0 °C to 45 °C and up to 2000 m altitude. Multiple N8954A units parallelize using master/slave control to achieve combined output exceeding 100 kW, programmed as a single logical supply without individual unit configuration. The BV0003B Power Supply app ships standard. LabVIEW drivers support integration with NI-VISA, NI-488.2, and Microsoft Visual C++ environments. Operating and Service Guides, datasheets, technical overviews, application notes, and 3D STEP models are available.

Technical Specifications
Output Power: 15,000 W (15 kW) maximum
Voltage Range: 0 to 500 V (programmable)
Current Range: 0 to 90 A (programmable)
Input Power: 360–440 VAC (nominal 400 VAC)
Output Configuration: Single output with autoranging
Measurement: Built-in voltage and current metering
Protection: Over-voltage, over-current, and over-temperature
Operating Temperature: 0 °C to 45 °C
Operating Altitude: Up to 2000 m
Form Factor: 3U rackmount (5.25 inches)

Key Features
Autoranging topology maintains full 15 kW across all voltage-current combinations
Programmable control with LAN (LXI Core), USB, GPIB, and analog interfaces
Web server interface for remote access via standard browser
Parallel operation with built-in master/slave control for systems exceeding 100 kW
Storage temperature range: –20 °C to 70 °C
Operating humidity: 80% RH

Typical Applications
Automated test equipment (ATE) requiring variable voltage-current profiles
Multi-rail power delivery where a single supply must service diverse load requirements
High-power testing scenarios benefiting from flexible V-I combinations
Parallel-configured systems demanding coordinated master/slave operation

Compatibility & Integration
Included software: BV0003B Power Supply app
LabVIEW drivers for NI-VISA, NI-488.2, and Microsoft Visual C++ environments
Documentation includes operating guides, service guides, datasheets, technical overviews, application notes, and 3D STEP models

Features & description

From manufacturer datasheet

Features

- 500 V / 90 A / 15,000 W • Autoranging: 30.0 A @ 500 V; 166.7 V @ 90 A • AC: 400 VAC nominal • Interfaces: LAN (LXI), USB, GPIB, analog • OVP/OCP/OTP; parallel primary/secondary

N8954A Characteristics / Specifications

PARAMETER	VALUE
Model	N8954A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Autoranging System DC Power Supply
Family	N8900 Series (15 kW, 400 VAC)
Alias	N8954A DC Output
Voltage	0–500 V; Current: 0–90 A; Power: 15,000 W
Autoranging	30.0 A @ 500 V; 166.7 V @ 90 A
Interfaces	LAN (LXI), USB, GPIB, analog

N8954A Specifications

PARAMETER	VALUE
Applications	High-voltage ATE on 400 Vac; autoranging system DC; parallel multi-unit banks.
Key Features	- 500 V / 90 A / 15,000 W
Technical Specifications	Model: N8954A
DC Output	Voltage: 0–500 V; Current: 0–90 A; Power: 15,000 W
Performance	Per N8900 datasheet 5991-2818EN N8934A/N8954A (500 V / 15 kW) column
AC Input	400 VAC nominal $\pm 10\%$; 3-phase; 45–65 Hz; PF > 0.99
Operational Notes	N8934A is the 208 Vac twin. Prefer N8900 datasheet 5991-2818EN.

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	N8954A
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	Autoranging System DC Power Supply
Family	N8900 Series (15 kW, 400 VAC)
Alias	N8954A

DC Output

Voltage: 0-500 V; Current: 0-90 A; Power: 15,000 W

Current @ Max Voltage: 30.0 A; Voltage @ Max Current: 166.7 V

Performance

Per N8900 datasheet 5991-2818EN N8934A/N8954A (500 V / 15 kW) column

AC Input

400 VAC nominal ±10%; 3-phase; 45-65 Hz; PF > 0.99

Operational Notes

N8934A is the 208 Vac twin. Prefer N8900 datasheet 5991-2818EN.

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.