

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N8756A System DC Power Supply 40V 125A

Agilent Keysight N8756A System DC Power Supply 40 V 125 A 5000 W The Agilent/Keysight N8756A is a 5 kW class N8700 Series system DC power supply. OEM datasheet ratings are 40 V, 125 A, and 5000 W with built-in measurement and LXI ClassCremote I/O. High-power ATE DC sourcing, burn-in racks, and power-device validation in a 2U package. Compact 2U 19 inch system DC supply package The Agilent/Keysight N8756A is a 5 kW class N8700 Series system DC power supply. OEM datasheet ratings are 40 V, 125 A, and 5000 W with built-in measurement and LXI ClassCremote I/O. High-power ATE DC sourcing, burn-in racks, and power-device validation in a 2U package. Compact 2U 19 inch system DC supply package LAN USB and GPIB interfaces standard LXI ClassCOvervoltage overcurrent and overtemperature protection with UVL window



MODEL

**Agilent / Keysight
N8756A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N8756A

LISTING

<https://aumictechlabs.com/products/n8756a-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight N8756A is a 5000W, single-output programmable DC power supply designed for ATE (Automatic Test Equipment) applications. It delivers stable and reliable DC power in a compact 2U rack-mountable package, offering a balance of performance and affordability for R&D, design validation, and manufacturing environments. The N8756A features a broad range of

output voltages and currents, built-in measurement capabilities, and essential protection mechanisms for safeguarding connected devices. Its system-ready design includes standard I/O interfaces for simplified integration into test systems. Technical Specifications DC Output Ratings Voltage: 40 V Current: 125 A Power: 5000 W Programming Accuracy Voltage: 0.025% + 30 mV Current: 0.1% + 375 mA Output Ripple and Noise CV p-p (peak-to-peak): 75 mV CV rms (root mean square): 10 mV AC Input Voltage Options: Flexible options include 208 V three-phase and 400 V three-phase. For 3.3 kW models, a 230 V single-phase option is also available. The AC input voltage hardware is permanently installed and cannot be changed after delivery. Frequency: 50/60 Hz Interfaces Standard Interfaces: GPIB, LAN (LXI Class C compliant), and USB Measurement and Control Built-in Measurement: Voltage and current measurement capabilities are integrated into the front panel. Front Panel Operation: Features rotary knobs and buttons for coarse and fine adjustments of output voltage and current, protection settings, and power-on states. The front panel controls can be locked to prevent accidental changes. Analog/Resistance Control: Offers analog (0-5V or 0-10V) or resistance (0-5k Ω or 0-10k Ω) control of output voltage and current. Protection Features Over-Temperature Protection: Shuts down output when internal temperature exceeds limits. Over-Current Protection (OVP): Shuts down output when current exceeds limits. Over-Voltage Protection (OVP): Shuts down output when voltage exceeds limits. Under-Voltage Limit (UVL): Prevents adjustment of the output voltage below a specified limit. Physical Characteristics Form Factor: Compact 2U rack-mountable package. Airflow: Front-to-back airflow design simplifies rack mounting by allowing stacking of instruments without requiring additional vertical space. Compatibility and Integration Parallel and Series Connection: Multiple units can be connected in parallel for higher current or in series for higher voltage. Up to four units can be connected in parallel. LXI Compliance: Fully compliant with the LXI Class C specification. Documentation Available Resources: Data Sheets, User Manuals, Technical Overviews, Application Notes, and Product Fact Sheets are available from the manufacturer. Why Choose Aumictech for Keysight N8756A? At Aumictech, we specialize in supplying high-end DC power supply equipment. Whether you need stable and reliable DC power, precise output regulation, or solid protection features, our team ensures the Keysight N8756A delivers maximum performance for your application.

N8756A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	System DC power supply
Series Family	Keysight N8700 5 kW class
Rated Output Voltage	40 V
Rated Output Current	125 A
Rated Output Power	5000 W
Output Ripple Noise CV Peak Peak	75 mV at 20 MHz bandwidth
Output Ripple Noise CV RMS	10 mV from 5 Hz to 1 MHz
CV Load Regulation	11 mV
CC Load Regulation	125 mA
CV Line Regulation	4 mV
CC Line Regulation	62.5 mA
Voltage Programming Accuracy	0.025 percent plus 30 mV
Current Programming Accuracy	0.1 percent plus 375 mA
Voltage Measurement Accuracy	0.025 percent plus 50 mV
Current Measurement Accuracy	0.1 percent plus 375 mA
Load Transient Recovery Time	less than 1 ms
Overvoltage Protection Range	2 to 44 V
Up Program Response Full Load	30 ms
Down Program Response Full Load	80 ms
Down Program Response No Load	900 ms
Remote Sense Compensation Per Lead	5 V
CC Ripple Noise RMS	300 mA
Programming Resolution Voltage	4.8 mV
Programming Resolution Current	15 mA
Front Panel Display Accuracy Voltage	200 mV

PARAMETER	VALUE
Front Panel Display Accuracy Current	625 mA
Command Response Time Typical	100 ms add to output response
Package Height	2 U
Dimensions HxWxD	88 mm x 423 mm x 442.5 mm excluding connectors and handles
Weight	16 kg (35.2 lb)
Remote Interfaces	LAN USB 2.0 GPIB
LXI Compliance	LXI ClassCCCommand Language: SCPI with IVI COM drivers
Parallel Capability	up to 4 identical units for higher current
Series Capability	2 identical units for higher voltage within isolation limits
Analog Program Monitor	0 to 5 V or 0 to 10 V and resistance programming paths
AC Input Options	208 V 3 phase or 400 V 3 phase; 230 V single phase on 3.3 kW models
Temperature Spec Window	ambient 0 to 40 C unless otherwise noted in OEM tables
Savable States	16 volatile memory locations
Bandwidth	Output Ripple Noise CV RMS: 10 mV from 5 Hz to 1 MHz

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
Instrument Type	System DC power supply
Series Family	Keysight N8700 5 kW class
Rated Output Voltage	40 V
Rated Output Current	125 A
Rated Output Power	5000 W
Output Ripple Noise CV Peak Peak	75 mV at 20 MHz bandwidth
Output Ripple Noise CV RMS	10 mV from 5 Hz to 1 MHz
CV Load Regulation	11 mV
CC Load Regulation	125 mA
CV Line Regulation	4 mV
CC Line Regulation	62.5 mA
Voltage Programming Accuracy	0.025 percent plus 30 mV
Current Programming Accuracy	0.1 percent plus 375 mA
Voltage Measurement Accuracy	0.025 percent plus 50 mV
Current Measurement Accuracy	0.1 percent plus 375 mA
Load Transient Recovery Time	less than 1 ms
Overvoltage Protection Range	2 to 44 V
Up Program Response Full Load	30 ms
Down Program Response Full Load	80 ms
Down Program Response No Load	900 ms
Remote Sense Compensation Per Lead	5 V
CC Ripple Noise RMS	300 mA
Programming Resolution Voltage	4.8 mV
Programming Resolution Current	15 mA
Front Panel Display Accuracy Voltage	200 mV
Front Panel Display Accuracy Current	625 mA

PARAMETER	VALUE
Command Response Time Typical	100 ms add to output response
Package Height	2 U
Dimensions HxWxD	88 mm x 423 mm x 442.5 mm excluding connectors and handles
Weight	16 kg (35.2 lb)
Remote Interfaces	LAN USB 2.0 GPIB
LXI Compliance	LXI ClassCCommand Language: SCPI with IVI COM drivers
Parallel Capability	up to 4 identical units for higher current
Series Capability	2 identical units for higher voltage within isolation limits
Analog Program Monitor	0 to 5 V or 0 to 10 V and resistance programming paths
AC Input Options	208 V 3 phase or 400 V 3 phase; 230 V single phase on 3.3 kW models
Temperature Spec Window	ambient 0 to 40 C unless otherwise noted in OEM tables
Savable States	16 volatile memory locations

Notes
Numeric rows from Keysight N8700 Series System DC Power Supplies datasheet 5990-3881EN model column N8756A.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 14, 2026

Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.