Aumictech
Test & measurement · bought, sold, repaired, calibrated

Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight N8742A System DC Power Supply 600V 5.5A

The Agilent/Keysight N8742A isasingle-output N8700 Series system DC power supply in the 3.3 kW class. OEM N8700 series datasheets rate this model at 600 V, 5.5 A, and 3300 W with built-in metering and standard LAN/USB/GPIB. ATE rack DC stimulus for aerospace defense automotive component and communications manufacturing validation, and high-power device characterization whereacompact 2U programmable source is required. Compact 2U 19 inch system DC supply package LAN USB and GPIB interfaces standard LXI ClassCOvervoltage overcurrent and overtemperature protection with UVL window Agilent Keysight N8742A System DC Power Supply 600 V 5.5 A 3300 W The Agilent/Keysight N8742A isasingle-output N8700 Series system DC power supply in the 3.3 kW class. OEM N8700 series datasheets rate this model at 600 V, 5.5 A, and 3300 W with built-in metering and standard LAN/USB/GPIB. ATE rack DC stimulus for aerospace defense automotive component and communications manufacturing validation, and high-power device characterization whereacompact 2U programmable source is required. Compact 2U 19 inch system DC supply package

MODEL **Agilent / Keysight N8742A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **N8742A**	LISTING **https://aumictechlabs.com/products/n8742a-3/**

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

This unit

The Keysight N8742A is a 3300W, single-output, programmable DC power supply designed for automated test equipment (ATE) systems and general-purpose power needs. It has a stable and reliable DC power source with a maximum output voltage of 600V and a maximum output current of 5.5A. This power supply is built with a compact 2U rackmount package, facilitating integration into standard test racks. The N8742A provides essential features for budget-conscious applications while maintaining solid performance for research and development, design validation, and manufacturing engineering across various industries, including aerospace and defense, automotive, and communications. Technical Specifications DC Output Ratings: Maximum Power: 3300 W Maximum Output Voltage: 600 V Maximum Output Current: 5.5 A Programming Accuracy: Voltage: ±0.05% + 300 mV Current: ±0.1% + 11 mA Output Ripple and Noise: CV Peak-to-Peak (p-p): 500 mV CV Root Mean Square (rms): 120 mV Programming and Control: Programming Method: Analog/Resistance control of output voltage and current Front Panel Operation: Includes rotary knobs and buttons for coarse and fine adjustments of output voltage, current, protection settings, and power-on states. Simultaneous display of output voltage and current. LED indicators for status and operating modes. Remote Access and Control: Built-in Web server for remote access and control via a standard browser. Interfaces: * GPIB * Ethernet/LAN * USB 2.0 * LXI Class C compliant Configuration and Connectivity: Parallel/Series Connection: Allows parallel connection of up to four identical units for increased output current, or series connection of two identical units for increased output voltage (subject to output terminal isolation limitations) Rear Panel Connectors: Wire clamp connectors for models with output voltages from 150V to 600V. Physical Characteristics: Form Factor: 2U Rackmount package Dimensions: Height: 88mm; Length: 442.5mm Rack Mounting: Rack mount ears and handles are standard. Optional N5740A rack mount slide kit available for integration into test racks. AC Input Options: Flexible AC input options available. It is crucial to select the correct AC input voltage option carefully, as the hardware is permanently installed at the factory and cannot be changed after delivery. If the wrong option is purchased, the unit would need to be returned, subject to Keysight approval and applicable charges, and a new order would be required. Included Accessories: Power Supply unit Power Cord Strain Relief Assembly AC Input Cover DB25 Subminiature Connector Shield Assembly Certificate of Calibration Why Choose Aumictech for Keysight N8742A? At Aumictech, we specialize in supplying high-end DC power supply equipment. Whether you need reliable power for automated testing, precise voltage and current control for R&D, or solid solutions for manufacturing process control, our team ensures the Keysight N8742A delivers maximum performance for your application.

N8742A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	System DC power supply
Series Family	Keysight N8700
Rated Output Voltage	600 V
Rated Output Current	5.5 A
Rated Output Power	3300 W
Output Ripple Noise CV Peak Peak	500 mV at 20 MHz bandwidth
Output Ripple Noise CV RMS	120 mV from 5 Hz to 1 MHz
CV Load Regulation	95 mV
CC Load Regulation	6.1 mA
CV Line Regulation	62 mV
CC Line Regulation	2.6 mA
Voltage Programming Accuracy	0.05 percent plus 300 mV
Current Programming Accuracy	0.1 percent plus 11 mA
Voltage Measurement Accuracy	0.1 percent plus 600 mV
Current Measurement Accuracy	0.1 percent plus 16.5 mA
Load Transient Recovery Time	less than 2 ms
Overvoltage Protection Range	5 to 660 V
Package Height	2 U
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 Class	208 V 3 phase or 400 V 3 phase; 3.3 kW models also offer 230 V single phase option
Temperature Spec Window	ambient 0 to 40 C unless otherwise noted in OEM tables

PARAMETER	VALUE
Bandwidth	Output Ripple Noise CV RMS: 120 mV from 5 Hz to 1 MHz

N8742A Specifications

PARAMETER	VALUE
Key Features	Compact 2U 19 inch system DC supply package
LAN USB and GPIB interfaces standard LXI Class C	Overvoltage overcurrent and overtemperature protection with UVL window
Technical Specifications	Instrument Type: System DC power supply
Notes	Numeric rows from Agilent/Keysight N8700 Series System DC Power Supplies datasheet model column N8742A.

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
Rated Output Voltage	600 V
Rated Output Current	5.5 A
Rated Output Power	3300 W
Output Ripple Noise CV Peak Peak	500 mV at 20 MHz bandwidth
Output Ripple Noise CV RMS	120 mV from 5 Hz to 1 MHz
CV Load Regulation	95 mV
CC Load Regulation	6.1 mA
CV Line Regulation	62 mV
CC Line Regulation	2.6 mA
Voltage Programming Accuracy	0.05 percent plus 300 mV
Current Programming Accuracy	0.1 percent plus 11 mA
Voltage Measurement Accuracy	0.1 percent plus 600 mV
Current Measurement Accuracy	0.1 percent plus 16.5 mA
Load Transient Recovery Time	less than 2 ms
Overvoltage Protection Range	5 to 660 V
Package Height	2 U
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 Class	208 V 3 phase or 400 V 3 phase; 3.3 kW models also offer 230 V single phase option
Temperature Spec Window	ambient 0 to 40 C unless otherwise noted in OEM tables

Notes

Numeric rows from Agilent/Keysight N8700 Series System DC Power Supplies datasheet model column N8742A.

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