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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Keysight N5742A DC Power Supply, 0 to 8 Vdc, 0 to 90 A, 720 W

Agilent Keysight N5742A System DC Power Supply The Agilent/Keysight N5742A is an N5700 Series single-output system DC power supply rated 8 V / 90 A / 720 W in a 1U package. OEM N5700 Series datasheets list built-in V/I measurement, GPIB/LAN/USB (LXI Class C), universal 85–265 Vac input, and paralleling/series connection flexibility. ATE racks, design validation, and manufacturing DC bias needing compact 1U programmable power with LXI connectivity. CV Ripple Noise Peak To Peak: 60 mV (up to 20 MHz) The Agilent/Keysight N5742A is an N5700 Series single-output system DC power supply rated 8 V / 90 A / 720 W in a 1U package. OEM N5700 Series datasheets list built-in V/I measurement, GPIB/LAN/USB (LXI Class C), universal 85–265 Vac input, and paralleling/series connection flexibility. ATE racks, design validation, and manufacturing DC bias needing compact 1U programmable power with LXI connectivity. CV Ripple Noise Peak To Peak: 60 mV (up to 20 MHz) CV Ripple Noise RMS: 8 mV (5 Hz to 1 MHz)



MODEL

**Agilent / Keysight
N5742A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

N5742A

LISTING

<https://aumictechlabs.com/products/n5742a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent N5742A is a single output DC power supply delivering 750W. With an output of 50V and 15A, It has reliable and stable power for a variety of testing and development applications.

This power supply features a compact 1U form factor, making it suitable for rack-mounted systems. The N5742A offers features such as over-voltage and over-current protection, ensuring the safety of connected devices.

Features & description

From manufacturer datasheet

Built-in voltage and current measurement

OVP OCP OTP and UVL protection Analog programming and monitoring Technical Specifications DC Output Voltage: 8 V DC Output Current: 90 A DC Output Power: 720 W CV Ripple Noise Peak To Peak: 60 mV (up to 20 MHz) CV Ripple Noise RMS: 8 mV (5 Hz to 1 MHz) Load Effect Voltage: 2.8 mV Load Effect Current: 23 mA Programming Accuracy Voltage: 0.05 percent + 4 mV Programming Accuracy Current: 0.1 percent + 90 mA Measurement Accuracy Voltage: 0.1 percent + 8 mV Measurement Accuracy Current: 0.1 percent + 270 mA Overvoltage Protection Range Class: 0.5-10 V Programming Resolution Voltage: 0.96 mV Programming Resolution Current: 10.8 mA CC Ripple Noise RMS: 180 mA Remote Sense Compensation Per Lead: 1 V AC Input: 85 to 265 Vac 47 to 63 Hz universal Remote Interfaces: GPIB Ethernet LAN USB 2.0 LXI Compliance: LXI ClassC Form Factor: 1U 19 inch Command Response Time Class: 55 ms class Series Family: Keysight N5700 Series Notes From Keysight N5700 Series System DC Power Supplies data sheet model column for N5742A. Warranted over 0 to 40 C ambient unless noted.

N5742A Characteristics / Specifications

PARAMETER	VALUE
DC Output Voltage	8 V
DC Output Current	90 A
DC Output Power	720 W
CV Ripple Noise Peak To Peak	60 mV (up to 20 MHz)
CV Ripple Noise RMS	8 mV (5 Hz to 1 MHz)
Load Effect Voltage	2.8 mV
Load Effect Current	23 mA
Programming Accuracy Voltage	0.05 percent + 4 mV
Programming Accuracy Current	0.1 percent + 90 mA
Measurement Accuracy Voltage	0.1 percent + 8 mV
Measurement Accuracy Current	0.1 percent + 270 mA
Overvoltage Protection Range Class	0.5-10 V
Programming Resolution Voltage	0.96 mV
Programming Resolution Current	10.8 mA
CC Ripple Noise RMS	180 mA
Remote Sense Compensation Per Lead	1 V
AC Input	85 to 265 Vac 47 to 63 Hz universal
Remote Interfaces	GPIB Ethernet LAN USB 2.0
LXI Compliance	LXI ClassCForm Factor: 1U 19 inch
Command Response Time Class	55 ms class
Series Family	Keysight N5700 Series

N5742A Specifications

PARAMETER	VALUE
Agilent Keysight N5742A System DC Power Supply	Overview
Applications	ATE racks, design validation, and manufacturing DC bias needing compact 1U programmable power with LXI connectivity.
Key Features	1U high density system DC supply
OVP OCP OTP and UVL protection	Analog programming and monitoring
Technical Specifications	DC Output Voltage: 8 V
Notes	From Keysight N5700 Series System DC Power Supplies data sheet model column for N5742A. Warranted over 0 to 40 C ambient unless noted.

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
DC Output Voltage	8 V
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DC Output Power	720 W
CV Ripple Noise Peak To Peak	60 mV (up to 20 MHz)
CV Ripple Noise RMS	8 mV (5 Hz to 1 MHz)
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Programming Accuracy Voltage	0.05 percent + 4 mV
Programming Accuracy Current	0.1 percent + 90 mA
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CC Ripple Noise RMS	180 mA
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AC Input	85 to 265 Vac 47 to 63 Hz universal
Remote Interfaces	GPIO Ethernet LAN USB 2.0
LXI Compliance	LXI ClassCForm Factor: 1U 19 inch
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Series Family	Keysight N5700 Series
Notes	
From Keysight N5700 Series System DC Power Supplies data sheet model column for N5742A. Warranted over 0 to 40 C ambient unless noted.	

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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NIST-traceable calibration · SAM registered ·
30-day returns
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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.