


## Agilent N5700 Series System DC Power Supplies

Models: N5741A-49A, N5750A-52A, N5761A-69A, N5770A-72A

### Data Sheet

- 24 Models: 750 W and 1500 W output power
- Up to 600 V and up to 180 A
- Small high density 1 U package
- Built-in voltage and current measurement
- Full protection from over-voltage and over-current
- 85-265 Vac Universal AC input
- Command compatibility for Sorensen DLM and Xantrex XFR DC Supplies
- LAN, USB, and GPIB interfaces standard
- Fully compliant to LXI Class C specification 

### Family of Affordable Basic System DC Power Supplies

The Agilent N5700 Series system DC power supplies give you just the right performance – at just the right price – in a compact (1 U) package. This family of affordable 750 W and 1500 W single-output programmable DC power supplies consists of 24 models for simple DC power applications. They provide stable output power, built-in voltage and current measurement, and output voltage and current from 6 V to 600 V and 1.3 A to 180 A.



These economical supplies offer many system-ready features like multiple standard I/O interfaces to simplify and accelerate test-system development for R&D, design validation, and manufacturing engineers in the aerospace/defense, automotive, component and communications industries.

### Small, High-Density Package Saves You Rack Space

The N5700 provides up to 1500 W in a small space-saving 1 U-high, 19-inch-wide package. Its air vents are in the front, side and rear (not on the top or bottom), so you can stack other instruments directly above or below it to save valuable rack space.



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### Easy Front-Panel Operation

You can quickly and easily operate the power supply with its rotary knobs and buttons. Using the front-panel controls, you can make coarse or fine adjustments of output voltage and current, protection settings, and set power-on states (last setting memory or factory default setting). The output voltage and current are displayed simultaneously, and LED indicators show power supply status and operating modes. You can lock the front panel controls to protect against accidental power-supply parameter changes.

### Extensive Device Protection

To safeguard your device from damage, the N5700 Series power supplies provide over-temperature, over-current and over-voltage protection (OVP) to shut down the power supply output when a fault condition occurs. They also offer an under-voltage limit (UVL) that prevents adjustment of the output voltage below a certain limit. The combination of UVL and OVP capabilities lets you create a protection window for sensitive load circuitry.

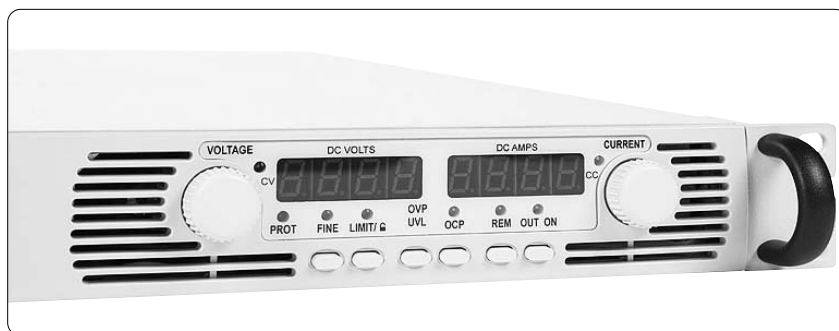


Figure 1. Front-panel control knobs and buttons make it easy to use N5700 power supplies.



Figure 2. Built-in Ethernet, USB 2.0, and GPIB interfaces enable easy system connections

### Simplify System Connections

The N5700 Series power supplies come standard with GPIB, Ethernet/LAN, and USB 2.0 interfaces giving you the flexibility to use your I/O interface of choice today and in the future. The N5700 is fully compliant with the LXI Class C specification.

### Remote Access and Control

The built-in Web server provides remote access and control of the instrument via a standard browser such as Microsoft® Internet Explorer. Using the Web browser, you can set up, monitor and operate the N5700 remotely.

### Easy System Integration and Configuration

To simplify system development, the N5700 comes standard with IVI-COM drivers. The N5700 supports the easy-to-use SCPI (Standard Commands for Programmable Instruments).

### Command Compatibility

The N5700 includes a compatibility command set for the Xantrex XFR series power supplies, the Sorensen DLM series power supplies, and the Agilent 603x series power supplies. This simplifies system integration when converting to the N5700. For a comparison of these products, see application notes:

- Side-by-side comparison: Agilent N5700 Series System DC Source and Sorensen DLM DC Power Supply, AN 1502-1, 5989-1628EN
- Side-by-side comparison: Agilent N5700 Series System DC Source and Xantrex XFR AN 1502-2, 5989-1630EN

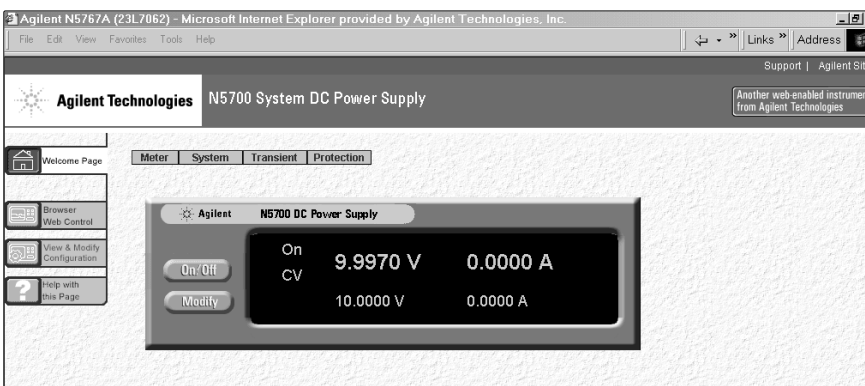


Figure 3. N5700 series web graphical user interface for remote access and control of the power supply

### Flexible configuration: Connect Multiple Units in Parallel and Series

Should you need greater output power, the N5700 series power supplies give you the flexibility to connect in parallel up to four similarly rated units for greater output current and connect two similarly rated units in series for greater output voltage (see output terminal isolation information).

### Analog Programming and Monitoring

The output voltage and current can be programmed from zero to full scale by either an analog voltage 0 to 5 V or 0 to 10 V or by resistances of 0 to 5 k $\Omega$  or 0 to 10 k $\Omega$ .

### Universal AC input

All N5700 models have universal AC input so they can be automatically operated from any AC mains input voltage worldwide. They can be operated from line voltages of 85 – 265 Vac, 47 to 63 Hz, with no switch to set or fuses to change when you switch from one voltage standard to another. They also provide power factor correction.

### Rack Mounting

The rack mount ears and handles are provided standard with every unit. In addition the N5740A rack mount slide kit makes it easy to integrate an N5700 into a test rack by providing all the necessary hardware to rack mount an N5700 series power supply in only 1 U of rack space.

## Performance Specifications

Unless otherwise noted, specifications are warranted over the ambient temperature range of 0 to 40°C.

		N5741A	N5742A	N5743A	N5744A	N5745A	N5746A
<b>DC Output ratings<sup>1</sup></b>	Voltage	6 V	8 V	12.5 V	20 V	30 V	40 V
	Current	100 A	90 A	60 A	38 A	25 A	19 A
	Power	600 W	720 W	750 W	760 W	750 W	760 W
<b>Output Ripple and Noise</b>	CV p-p <sup>2</sup>	60 mV	60 mV	60 mV	60 mV	60 mV	60 mV
	CV rms <sup>3</sup>	8 mV	8 mV	8 mV	8 mV	8 mV	8 mV
<b>Load Effect</b> (change from 10% to 90%)	Voltage	2.6 mV	2.8 mV	3.25 mV	4 mV	5 mV	6 mV
	Current	25 mA	23 mA	17 mA	12.6 mA	10 mA	8.8 mA
<b>Source Effect</b> (change from 85-132 VAC input or 170-265 VAC input)	Voltage	2.6 mV	2.8 mV	3.25 mV	4 mV	5 mV	6 mV
	Current	12 mA	11 mA	8 mA	5.8 mA	4.5 mA	3.9 mA
<b>Programming Accuracy<sup>1</sup></b>	Voltage 0.05%+	3 mV	4 mV	6.25 mV	10 mV	15 mV	20 mV
	Current 0.1%+	100 mA	90 mA	60 mA	38 mA	25 mA	19 mA
<b>Measurement Accuracy</b>	Voltage 0.1%+	6 mV	8 mV	12.5 mV	20 mV	30 mV	40 mV
	Current 0.1%+	300 mA	270 mA	180 mA	114 mA	75 mA	57 mA
<b>Load Transient Recovery Time<sup>4</sup></b>	Time	≤1.5 ms	≤1.5 ms	≤1.5 ms	≤1 ms	≤1 ms	≤1 ms
<b>Supplemental Characteristics</b> Supplemental characteristics are not warranted but are descriptions of typical performance determined either by design or type testing.							
<b>Output Response Time</b> (settle to within ±1.0% of the rated output, with a resistive load)	Up, full load	0.08 s	0.08 s	0.08 s	0.08 s	0.08 s	0.08 s
	Down, full load	0.05 s	0.05 s	0.05 s	0.05 s	0.08 s	0.08 s
	Down, no load	0.5 s	0.6 s	0.7 s	0.8 s	0.9 s	1.0 s
<b>Command Response Time<sup>5</sup></b>		55 ms					
<b>Remote Sense Compensation</b>	Volts/load lead	1 V	1 V	1 V	1 V	1.5 V	2 V
<b>Over-voltage Protection</b>	Range	0.5-7.5 V	0.5-10 V	1-15 V	1-24 V	2-36 V	2-44 V
	Accuracy	0.06 V	0.08 V	0.125 V	0.20 V	0.30 V	0.40 V
<b>Output Ripple and Noise<sup>6</sup></b>	CC rms	200 mA	180 mA	120 mA	76 mA	63 mA	48 m
<b>Programming Resolution</b> <b>Measurement Resolution</b>	Voltage	0.72 mV	0.96 mV	1.5 mV	2.4 mV	3.6 mV	4.8 mV
	Current	12 mA	10.8 mA	7.2 mA	4.56 mA	3 mA	2.3 mA
<b>Front Panel Display Accuracy</b> (4 digits; ±1 count)	Voltage	0.03 V	0.04 V	0.06 V	0.10 V	0.15 V	0.20 V
	Current	0.50 A	0.45 A	0.30 A	0.19 A	0.13 A	0.10 A

### Notes:

<sup>1</sup> Minimum voltage is guaranteed to a maximum of 0.2% of the rated output voltage. Minimum current is guaranteed to a maximum of 0.4% of the rated output current.

<sup>2</sup> Up to 20 MHz

<sup>3</sup> From 5 Hz – 1 MHz

<sup>4</sup> Time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated output current. Voltage set point from 10% to 100% of rated output

<sup>5</sup> Add this to the output response time to obtain the total programming time

<sup>6</sup> From 5 Hz – 1 MHz, at 10% to 100% of output voltage at full load (for 6 V units from 33% to 100% of output voltage)

## Performance Specifications Unless otherwise noted, specifications are warranted over the ambient temperature range of 0 to 40°C.

		N5747A	N5748A	N5749A	N5750A	N5751A	N5752A
<b>DC Output ratings<sup>1</sup></b>	Voltage	60 V	80 V	100 V	150 V	300 V	600 V
	Current	12.5 A	9.5 A	7.5 A	5 A	2.5 A	1.3 A
	Power	750 W	760 W	750 W	750 W	750 W	780 W
<b>Output Ripple and Noise</b>	CV p-p <sup>2</sup>	60 mV	80 mV	80 mV	100 mV	150 mV	300 mV
	CV rms <sup>3</sup>	8 mV	8 mV	8 mV	12 mV	20 mV	60 mV
<b>Load Effect</b> (change from 10% to 90%)	Voltage	8 mV	10 mV	12 mV	17 mV	32 mV	62 mV
	Current	7.5 mA	6.9 mA	6.5 mA	6 mA	5.5 mA	5.26 mA
<b>Source Effect</b> (change from 85-132 VAC input or 170-265 VAC input)	Voltage	8 mV	10 mV	12 mV	17 mV	32 mV	62 mV
	Current	3.25 mA	2.95 mA	2.75 mA	2.5 mA	2.25 mA	2.13 mA
<b>Programming Accuracy<sup>1</sup></b>	Voltage 0.05%+	30 mV	40 mV	50 mV	75 mV	150 mV	300 mV
	Current 0.1%+	12.5 mA	9.5 mA	7.5 mA	5 mA	2.5 mA	1.3 mA
<b>Measurement Accuracy</b>	Voltage 0.1%+	60 mV	80 mV	100 mV	150 mV	300 mV	600 mV
	Current 0.1%+	37.5 mA	28.5 mA	22.5 mA	15 mA	7.5 mA	3.9 mA
<b>Load Transient Recovery Time<sup>4</sup></b>	Time	≤ 1 ms	≤ 1 ms	≤ 1 ms	≤ 2 ms	≤ 2 ms	≤ 2 ms
<b>Supplemental Characteristics</b> <small>Supplemental characteristics are not warranted but are descriptions of typical performance determined either by design or type testing.</small>							
<b>Output Response Time</b> (settle to within ±1.0% of the rated output, with a resistive load)	Up, full load	0.08 s	0.15 s	0.15 s	0.15 s	0.15 s	0.25 s
	Down, full load	0.08 s	0.15 s	0.15 s	0.15 s	0.15 s	0.30 s
	Down, no load	1.1 s	1.2 s	1.5 s	2.0 s	3.0 s	4.0 s
<b>Command Response Time<sup>5</sup></b>		55 ms					
<b>Remote Sense Compensation</b>	Volts/load lead	3 V	4 V	5 V	5 V	5 V	5 V
<b>Over-voltage Protection</b>	Range	5-66 V	5-88 V	5-110 V	5-165 V	5-330 V	5-660 V
	Accuracy	0.60 V	0.80 V	1 V	1.5 V	3 V	6 V
<b>Output Ripple and Noise<sup>6</sup></b>	CC rms	38 mA	29 mA	23 mA	18 mA	13 mA	8 mA
<b>Programming Resolution</b> <b>Measurement Resolution</b>	Voltage	7.2 mV	9.6 mV	12 mV	18 mV	36 mV	72 mV
	Current	1.5 mA	1.14 mA	0.9 mA	0.6 mA	0.3 mA	0.156 mA
<b>Front Panel Display Accuracy</b> (4 digits; ±1 count)	Voltage	0.3 V	0.4 V	0.5 V	0.75 V	1.5 V	3 V
	Current	0.0625 A	0.0475 A	0.0375 A	0.0250 A	0.0125 A	0.0065 A

### Notes:

<sup>1</sup> Minimum voltage is guaranteed to a maximum of 0.2% of the rated output voltage. Minimum current is guaranteed to a maximum of 0.4% of the rated output current.

<sup>2</sup> Up to 20 MHz

<sup>3</sup> From 5 Hz – 1 MHz

<sup>4</sup> Time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated output current. Voltage set point from 10% to 100% of rated output

<sup>5</sup> Add this to the output response time to obtain the total programming time

<sup>6</sup> From 5 Hz – 1 MHz, at 10% to 100% of output voltage at full load (for 6 V units from 33% to 100% of output voltage)

## Performance Specifications

Unless otherwise noted, specifications are warranted over the ambient temperature range of 0 to 40°C.

		N5761A	N5762A	N5763A	N5764A	N5765A	N5766A
<b>DC Output ratings<sup>1</sup></b>	Voltage	6 V	8 V	12.5 V	20 V	30 V	40 V
	Current	180 A	165 A	120 A	76 A	50 A	38 A
	Power	1080 W	1320 W	1500 W	1520 W	1500 W	1520 W
<b>Output Ripple and Noise</b>	CV p-p <sup>2</sup>	60 mV	60 mV	60 mV	60 mV	60 mV	60 mV
	CV rms <sup>3</sup>	8 mV	8 mV	8 mV	8 mV	8 mV	8 mV
<b>Load Effect</b> (change from 10% to 90%)	Voltage	2.6 mV	2.8 mV	3.25 mV	4 mV	5 mV	6 mV
	Current	41 mA	38 mA	29 mA	20.2 mA	15 mA	12.6 mA
<b>Source Effect</b> (change from 85-132 VAC input or 170-265 VAC input)	Voltage	2.6 mV	2.8 mV	3.25 mV	4 mV	5 mV	6 mV
	Current	20 mA	18.5 mA	14 mA	9.6 mA	7 mA	5.8 mA
<b>Programming Accuracy<sup>1</sup></b>	Voltage 0.05%+	3 mV	4 mV	6.25 mV	10 mV	15 mV	20 mV
	Current 0.1%+	180 mA	165 mA	120 mA	76 mA	50 mA	38 mA
<b>Measurement Accuracy</b>	Voltage 0.1%+	6 mV	8 mV	12.5 mV	20 mV	30 mV	40 mV
	Current 0.1%+	540 mA	495 mA	360 mA	228 mA	150 mA	114 mA
<b>Load Transient Recovery Time<sup>4</sup></b>	Time	≤1.5 ms	≤1.5 ms	≤1.5 ms	≤1 ms	≤1 ms	≤1 ms
<b>Supplemental Characteristics</b> Supplemental characteristics are not warranted but are descriptions of typical performance determined either by design or type testing.							
<b>Output Response Time</b> (settle to within ±1.0% of the rated output, with a resistive load)	Up, full load	0.08 s	0.08 s	0.08 s	0.08 s	0.08 s	0.08 s
	Down, full load	0.05 s	0.05 s	0.05 s	0.05 s	0.08 s	0.08 s
	Down, no load	0.5 s	0.6 s	0.7 s	0.8 s	0.9 s	1.0 s
<b>Command Response Time<sup>5</sup></b>		55 ms					
<b>Remote Sense Compensation</b>	Volts/load lead	1 V	1 V	1 V	1 V	1.5 V	2 V
<b>Over-voltage Protection</b>	Range	0.5-7.5 V	0.5-10 V	1-15 V	1-24 V	2-36 V	2-44 V
	Accuracy	0.06 V	0.08 V	0.125 V	0.20 V	0.30 V	0.40 V
<b>Output Ripple and Noise<sup>6</sup></b>	CC rms	360 mA	330 mA	240 mA	152 mA	125 mA	95 mA
<b>Programming Resolution</b> <b>Measurement Resolution</b>	Voltage	0.72 mV	0.96 mV	1.5 mV	2.4 mV	3.6 mV	4.8 mV
	Current	21.6 mA	19.8 mA	14.4 mA	9.12 mA	6 mA	4.6 mA
<b>Front Panel Display Accuracy</b> (4 digits; ±1 count)	Voltage	0.03 V	0.04 V	0.0625 V	0.1 V	0.15 V	0.2 V
	Current	0.90 A	0.825 A	0.60 A	0.38 A	0.25 A	0.19 A

### Notes:

<sup>1</sup> Minimum voltage is guaranteed to a maximum of 0.2% of the rated output voltage. Minimum current is guaranteed to a maximum of 0.4% of the rated output current.

<sup>2</sup> Up to 20 MHz

<sup>3</sup> From 5 Hz – 1 MHz

<sup>4</sup> Time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated output current. Voltage set point from 10% to 100% of rated output

<sup>5</sup> Add this to the output response time to obtain the total programming time

<sup>6</sup> From 5 Hz – 1 MHz, at 10% to 100% of output voltage at full load  
(for 6 V units from 33% to 100% of output voltage)

## Performance Specifications Unless otherwise noted, specifications are warranted over the ambient temperature range of 0 to 40°C.

		N5767A	N5768A	N5769A	N5770A	N5771A	N5772A
<b>DC Output ratings<sup>1</sup></b>	Voltage	60 V	80 V	100 V	150 V	300 V	600 V
	Current	25 A	19 A	15 A	10 A	5 A	2.6 A
	Power	1500 W	1520 W	1500 W	1500 W	1500 W	1560 W
<b>Output Ripple and Noise</b>	CV p-p <sup>2</sup>	60 mV	80 mV	80 mV	100 mV	150 mV	300 mV
	CV rms <sup>3</sup>	8 mV	8 mV	8 mV	12 mV	20 mV	60 mV
<b>Load Effect</b> (change from 10% to 90%)	Voltage	8 mV	10 mV	12 mV	17 mV	32 mV	62 mV
	Current	10 mA	8.8 mA	8 mA	7 mA	6 mA	5.5 mA
<b>Source Effect</b> (change from 85-132 VAC input or 170-265 VAC input)	Voltage	8 mV	10 mV	12 mV	17 mV	32 mV	62 mV
	Current	4.5 mA	3.9 mA	3.5 mA	3 mA	2.5 mA	2.26 mA
<b>Programming Accuracy<sup>1</sup></b>	Voltage 0.05%+	30 mV	40 mV	50 mV	75 mV	150 mV	300 mV
	Current 0.1%+	25 mA	19 mA	15 mA	10 mA	5 mA	2.6 mA
<b>Measurement Accuracy</b>	Voltage 0.1%+	60 mV	80 mV	100 mV	150 mV	300 mV	600 mV
	Current 0.1%+	75 mA	57 mA	45 mA	30 mA	15 mA	7.8 mA
<b>Load Transient Recovery Time<sup>4</sup></b>	Time	≤ 1 ms	≤ 1 ms	≤ 1 ms	≤ 2 ms	≤ 2 ms	≤ 2 ms
<b>Supplemental Characteristics</b> <small>Supplemental characteristics are not warranted but are descriptions of typical performance determined either by design or type testing.</small>							
<b>Output Response Time</b> (settle to within ±1.0% of the rated output, with a resistive load)	Up, full load	0.08 s	0.15 s	0.15 s	0.15 s	0.15 s	0.25 s
	Down, full load	0.08 s	0.15 s	0.15 s	0.15 s	0.15 s	0.30 s
	Down, no load	1.1 s	1.2 s	1.5 s	2.0 s	3.0 s	4.0 s
<b>Command Response Time<sup>5</sup></b>		55 ms					
<b>Remote Sense Compensation</b>	Volts/load lead	3 V	4 V	5 V	5 V	5 V	5 V
<b>Over-voltage Protection</b>	Range	5-66 V	5-88 V	5-110 V	5-165 V	5-330 V	5-660 V
	Accuracy	0.60 V	0.80 V	1 V	1.5 V	3 V	6 V
<b>Output Ripple and Noise<sup>6</sup></b>	CC rms	75 mA	57 mA	45 mA	35 mA	25 mA	12 mA
<b>Programming Resolution</b> <b>Measurement Resolution</b>	Voltage	7.2 mV	9.6 mV	12 mV	18 mV	36 mV	72 mV
	Current	3 mA	2.28 mA	1.8 mA	1.2 mA	0.6 mA	0.312 mA
<b>Front Panel Display Accuracy</b> (4 digits; ±1 count)	Voltage	0.3 V	0.4 V	0.5 V	0.75 V	1.5 V	3 V
	Current	0.125 A	0.095 A	0.075 A	0.050 A	0.025 A	0.013 A

### Notes:

<sup>1</sup> Minimum voltage is guaranteed to a maximum of 0.2% of the rated output voltage. Minimum current is guaranteed to a maximum of 0.4% of the rated output current.

<sup>2</sup> Up to 20 MHz

<sup>3</sup> From 5 Hz – 1 MHz

<sup>4</sup> Time for output voltage to recover within 0.5% of its rated output for a load change from 10 to 90% of its rated output current. Voltage set point from 10% to 100% of rated output

<sup>5</sup> Add this to the output response time to obtain the total programming time

<sup>6</sup> From 5 Hz – 1 MHz, at 10% to 100% of output voltage at full load (for 6 V units from 33% to 100% of output voltage)

## Supplemental Characteristics for All Model Numbers

### Series and Parallel Capability

#### Parallel operation

Up to 4 units can be connected in master/slave mode

#### Series operation

Up to 2 units can be connected in series

### Output Terminal Isolation

#### 6 V to 60 V units

No output terminal may be more than  $\pm 60$  VDC from any other terminal or chassis ground

#### 80 V to 600 V units

No output terminal may be more than  $\pm 600$  VDC from any other terminal or chassis ground

### Store-recall States

#### Volatile memory

locations: 16

### Analog Programming

(of output voltage and current)

#### Input Signal

selectable;  
0 to 5 V/0 to 10 V full scale

#### Input Impedance

selectable;  
0 to 5k $\Omega$ /0 to 10 k $\Omega$  full scale

### Interface Capabilities

#### GPIB

SCPI - 1993, IEEE 488.2 compliant interface

#### USB 2.0

Requires Agilent I/O Library version L.01.01

#### 10/100 LAN

Requires Agilent I/O library version L.01.01

### Web Server

Built-in Web server requires Internet Explorer 5+ or Netscape 6.2+

### Environmental Conditions

#### Environment

Indoor use, installation category II (AC input), pollution degree 2

#### Operating temperature

0°C to 40°C @ 100% load

#### Storage temperature

-20°C to 70°C

#### Operating humidity

30% to 90% relative humidity (no condensation)

#### Storage humidity

10% to 95% relative humidity (no condensation)

#### Altitude

- Up to 3000 meters.  
Derate the output current by 2%/100 m above 2000 m.
- Derate the maximum ambient temperature by 1°C/100 m above 2000 m.

### Regulatory Compliance

#### EMC

- European EMC directive 89/336/EEC for Class A products
- Australian C- Tick mark
- This ISM device complies with Canadian ICES-001. Cet appareil ISM est conforme à la norme NMB-001 du Canada.

#### Safety

- European Low Voltage Directive 73/23/EEC
- US and Canadian safety standards

- Any LEDs used in this product are Class 1 as per IEC 825-1

### Acoustic Noise Declaration

Emission Directive:

- Sound Pressure Lp <70 dB(A), At Operator Position, \*Normal Operation, \*According to EN 27779 (Type Test).
- Schalldruckpegel Lp <70 dB(A) \*Am Arbeitsplatz, \*Normaler Betrieb, \*Nach EN 27779 (Typprüfung).

### AC Input

#### Nominal Input

100 – 240 VAC; 50/60 Hz

#### Input Current 750 W

10.5 A @ 100 VAC nominal;  
5 A @ 200 VAC nominal

#### Input Current 1500 W

21 A @ 100 VAC nominal;  
11 A @ 200 VAC nominal

#### Input Range

85 – 265 VAC; 47 – 63 Hz.

#### Power Factor

0.99 at nominal input and rated output power

#### Efficiency

76% – 87% for 750 W units;  
77% – 88% for 1500 W units

#### Inrush Current

<25 A for 750 W units;  
<50 A for 1500 W units

### Dimensions

(excluding connectors, and handles)

**Height** 43.6 mm (1.72 in)

**Width** 422.8 mm (16.65 in)

**Depth** 432.8 mm (17.04 in)

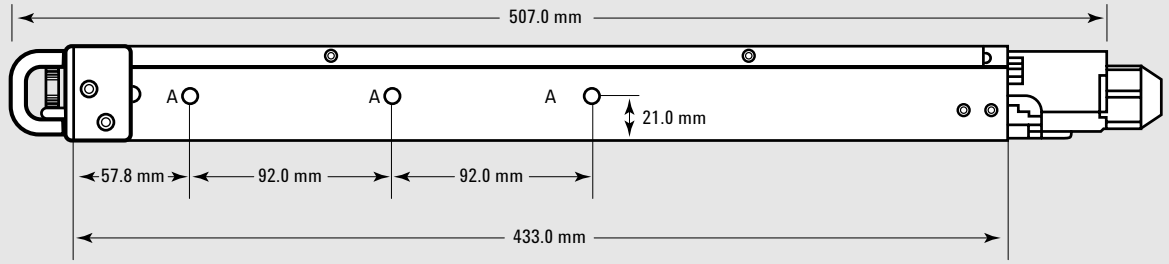
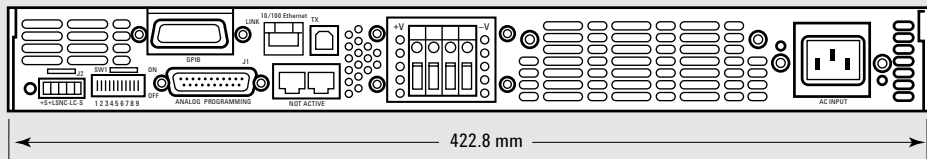
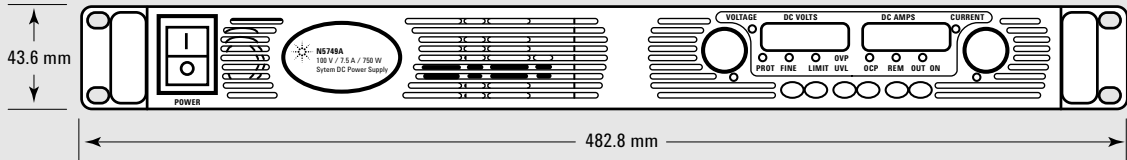
### Weight

**750 W** 7 Kg (15.4 lbs.)

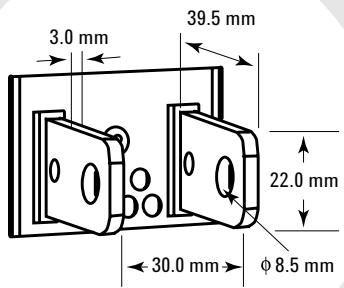
**1500 W** 8.5 Kg (18.7 lbs.)



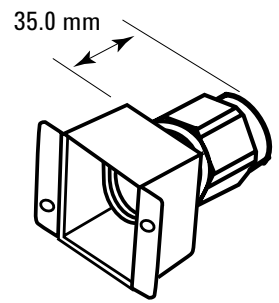
# Outline Diagram



**DC Output**  
Bus-Bar Detail  
6 V to 60 V  
Models

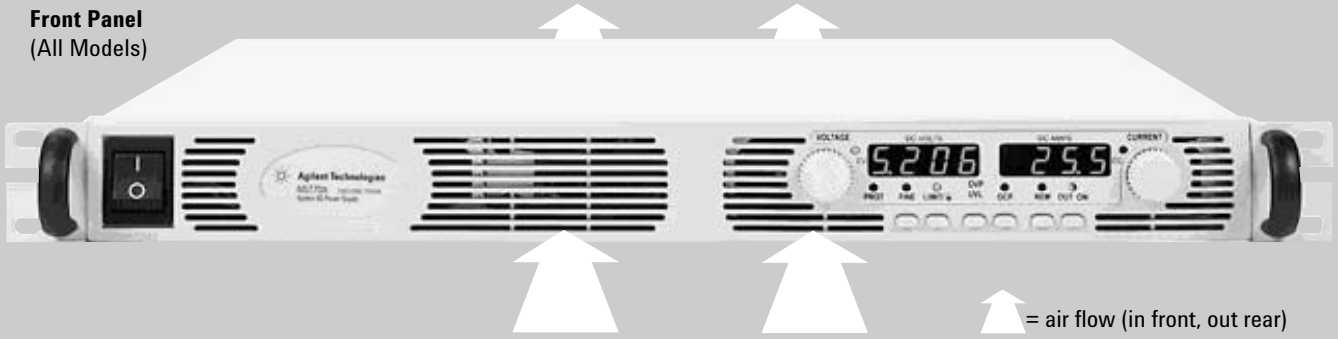


**AC Input**  
Strain-Relief Detail  
1500 W Models



## Front and Rear Panel Detail

**Front Panel**  
(All Models)



**Rear Panel\***  
(6 V to 60 V, 1500 W Models)



(80 V to 600 V, 1500 W Models)



(6 V to 60 V, 750 W Models)



(80 V to 600 V, 750 W Models)



## Ordering Information

### Available Models

#### 750 W Models

<b>N5741A</b>	System DC Power Supply	6 V, 100 A, 600 W
<b>N5742A</b>	System DC Power Supply	8 V, 90 A, 720 W
<b>N5743A</b>	System DC Power Supply	12.5 V, 60 A, 750 W
<b>N5744A</b>	System DC Power Supply	20 V, 38 A, 760 W
<b>N5745A</b>	System DC Power Supply	30 V, 25 A, 750 W
<b>N5746A</b>	System DC Power Supply	40 V, 19 A, 760 W
<b>N5747A</b>	System DC Power Supply	60 V, 12.5 A, 750 W
<b>N5748A</b>	System DC Power Supply	80 V, 9.5 A, 760 W
<b>N5749A</b>	System DC Power Supply	100 V, 7.5 A, 750 W
<b>N5750A</b>	System DC Power Supply	150 V, 5 A, 750 W
<b>N5751A</b>	System DC Power Supply	300 V, 2.5 A, 750 W
<b>N5752A</b>	System DC Power Supply	600 V, 1.3 A, 780 W

#### 1500 W Models

<b>N5761A</b>	System DC Power Supply	6 V, 180 A, 1080 W
<b>N5762A</b>	System DC Power Supply	8 V, 165 A, 1320 W
<b>N5763A</b>	System DC Power Supply	12.5 V, 120 A, 1500 W
<b>N5764A</b>	System DC Power Supply	20 V, 76 A, 1520 W
<b>N5765A</b>	System DC Power Supply	30 V, 50 A, 1500 W
<b>N5766A</b>	System DC Power Supply	40 V, 38 A, 1520 W
<b>N5767A</b>	System DC Power Supply	60 V, 25 A, 1500 W
<b>N5768A</b>	System DC Power Supply	80 V, 19 A, 1520 W
<b>N5769A</b>	System DC Power Supply	100 V, 15 A, 1500 W
<b>N5770A</b>	System DC Power Supply	150 V, 10 A, 1500 W
<b>N5771A</b>	System DC Power Supply	300 V, 5 A, 1500 W
<b>N5772A</b>	System DC Power Supply	600 V, 2.6 A, 1560 W

### Options

#### 1500 W Models

**Opt 861**  
Unterminated Power  
Cord, USA, Canada,  
Japan, China, Other

**Opt 862**  
Harmonized Unterminated  
Power Cord, Europe

#### 750 W Models

**Opt 900**  
Power Cord, United Kingdom

**Opt 902**  
Power Cord, Europe

**Opt 903**  
Power Cord, USA, Canada

**Opt 918**  
Power Cord, Japan

**Opt 922**  
Power Cord, China

### Accessories

**N5740A**  
Rack Mount Slide Kit  
(required for rack  
mounting; standard  
system 11 rack-mounting  
hardware will not work)

## Related literature

These application notes will help you compare Agilent system DC sources with power supplies from other manufacturers:

- Side-by-Side Comparison: Agilent N5700 Series System DC Source and Sorensen DLM DC Power Supply, AN 1502-1  
5989-1628EN  
<http://cp.literature.agilent.com/litweb/pdf/5989-1628EN.pdf>
- How to Convert from a Sorensen DLM to an Agilent N5700, AN 1503-1  
5989-1629EN  
<http://cp.literature.agilent.com/litweb/pdf/5989-1629EN.pdf>
- Side-by-Side Comparison: Agilent N5700 Series System DC Source and Xantrex XFR System Power Supplies, AN 1502-2  
5989-1630EN  
<http://cp.literature.agilent.com/litweb/pdf/5989-1630EN.pdf>
- How to Convert from a Xantrex XFR to an Agilent N5700, AN 1503-2  
5989-1631EN  
<http://cp.literature.agilent.com/litweb/pdf/5989-1631EN.pdf>
- Trends in Medium Power (~1 kW) DC Power Supplies, 5989-1331EN  
<http://cp.literature.agilent.com/litweb/pdf/5989-1331EN.pdf>

Agilent's IO Libraries Suite ships with the N5700 to help you quickly establish an error-free connection between your PC and instruments - regardless of the vendor. It provides robust instrument control and works with the software development environment you choose.

**For additional description of Agilent's IO Libraries Suite features and installation requirements, please go to [www.agilent.com/find/iosuite-datasheet](http://www.agilent.com/find/iosuite-datasheet)**

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For the latest and complete specifications, refer to the N5700 User's Guide, Agilent part number 5969-2917. The web contains the most up-to-date version of the User's Guide. Go to <http://www.agilent.com/find/N5700>

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