# Keysight Advanced Power System (APS) N6900 Series DC Power Supplies

## Versatility was never faster

For ATE applications where high performance is critical



- 1. 1 kW models have a 1U full-rack footprint
- 2. 2 kW models have a 2U full-rack footprint

Note: Built-in paralleling capability up to 10 kW

## Tune your ATE system for your specific test challenges

These options allow engineers to fill their ATE testing needs without paying for more capability than they require.

Accuracy package (Option 301):

- Adds a second seamless measurement range for current
- Full factory calibration

Measurement enhancements (Option 302):

- Adds external data logging and voltage and current digitizers with programmable sample rates

Source and speed enhancements (Option 303):

 Adds constant-dwell arbitrary waveforms and output list capability, and provides improvement in up/down programming time

Disconnect and polarity-reversal relays (Options 760 and 761):

- Allows voltages to be switched between positive and negative values

# Versa Power architecture delivers the fastest, most accurate, integrated power system

Accelerate test-system throughput with industry-leading speed

- 100x test speeds compared to standard system power supplies
- Command processing speed < 2 ms
- Up/down programming speeds 500 μs
- Transient response time 100 μs
- Adjustable measurement rate to balance speed and accuracy

Capture your DUT's current profile with accurate measurements

- Dual voltage and current measurement capability with DMM-like accuracy
- Current and voltage high-resolution digitizers for making dynamic measurements
- Power, peak power, watt hour, and amp hour measurements

Reduce your ATE development time and cost with highly integrated capabilities

- Continuously source and sink power for power storage test applications
- Smart triggering to increase throughput, protect your DUT, and reduce test complexity
- Generate voltage or current waveforms with arbitrary waveform capability
- Built-in paralleling capability up to 10 kW

N6900A 1 kW/2 kW	N6950A/70A	N6951A/71A	N6952A/72A	N6953A/73A	N6954A/74A	N6976A	N6977A
DC ratings							
Voltage range	0 to 9 V	0 to 20 V	0 to 40 V	0 to 60 V	0 to 80 V	0 to 120 V	0 to 160 V
Current max	100 A/200 A	50 A/100 A	25 A/50 A	16.7 A/33.3 A	12.5 A/25 A	16.7 A	12.5 A
Current sink @ 10%	-10 A/-20 A	-5 A/-10 A	-2.5 A/-5 A	-1.67 A/-3.33 A	-1.25 A/-2.5 A	-1.67 A	–1.25 A
Current sink @ 100%	-100 A/-200 A	-50 A/-100 A	-25 A/-50 A	-16.7 A/-33.3 A	-12.5 A/-25 A	–16.7 A	–12.5 A
Power	900 W/1.8 kW	1 kW/2 kW	1 kW/2 kW	1 kW/2 kW	1 kW/2 kW	2 kW	2 kW
MSRP	\$5,700/\$7,700	\$5,700/\$7,700	\$5,700/\$7,700	\$5,700/\$7,700	\$5,700/\$7,700	\$7,700	\$7,700

## APS N6900 Series features

Feature	N6900 1 kW and 2 kW models		
Voltage and current programming	16-bit precision		
Voltage and current measurements	18-bit precision		
Voltage up/down programming time <sup>1</sup>	3 ms/3 ms		
Voltage up/down programming time <sup>1</sup>	0.5 ms/0.35 ms with Option 303		
Transient response time (recovery time) 1	100 μs		
Two-quadrant operation (10% standard, 100% optional)	Yes		
Smart triggering	Yes		
Power storage and efficiency measurements	Yes		
Output sequencing/adjustable slew rate	Yes		
Parallel operation	Yes		
Low current measurement range	Yes with Option 301		
Seamless current measurements	Yes with Option 301		
V and I digitizers with programmable sample rates	Yes with Option 302		
External measurement logging	Yes with Option 302		
Output list capability	Yes with Option 303		
Arbitrary waveform generation	Yes with Option 303		
Output relays (disconnect and polarity reversal)	Yes with Option 760/761		

- 1. For detailed specifications refer to APS User Guide
- 2. N6950A and N6970A only have output disconnect relays

## www.keysight.com/find/N6900



For more information, check out: www.keysight.com/find/TestChallenges

Please consult with your distributor for final pricing.

## APS options and accessories

Model	Description	MSRP
Option 301	Accuracy package	\$1,750
Option 302	Measurement enhancements	\$1,750
Option 303	Source and speed enhancements	\$1,750
Option 760/761	Relays	\$1,750
N7909A	Power dissipater unit adds current sinking or two-quadrant operation	\$2,600
N7908A	Black box recorder runs continually in the background	\$3,000
N7907A	Rack mount kit for both 1 kW and 2 kW units	\$179
N7906A	Power assistant software	Free

Use the APS to help you overcome power-related test challenges like these:

- Increasing test system throughput
- Building a continuous source and load
- Protecting against power-related damage
- Characterizing dynamic current profiles
- Maintaining output integrity under dynamic load conditions
- Characterizing inrush current
- Tracking power events for root-cause analysis
- Generating power transients
- Properly powering on/off a DUT

#### Three-Year Warranty



#### www.keysight.com/find/ThreeYearWarranty

Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

#### Keysight Assurance Plans



### www.keysight.com/find/AssurancePlans

Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.