

ADG series

Preen®

Programmable High Power DC Power Supply

Output Voltage
up to
2000V



▼ Low Ripple & High Regulation

▼ 12 Different Output Voltages & 41 Models

▼ Compact & High Power Density

▼ Output Current up to
2000A

▼ Multiple Simulation Functions

▼ Fast Transient Response <4-12ms

▼ High Output Power
30-100kW

▼ Intuitive Touch Screen HMI

▼ Efficiency up to >90%

A DC power supply with

High Output Voltage, High Output Current, High Power, and Programmable Functions.

Preen's ADG series is a programmable DC power supply with high power density and high output power, offering great response time, high accuracy and many output voltage and current combinations. With its high performance, ADG series is applied to industries of EV, aerospace, renewable energy, server and battery for R&D testing, quality burning test, or facility power.

With output power up to 100kW per unit, the ADG series offers output voltage up to 1600V and output current up to 2000A. Users can select standard RS-485 interface or optional RS-232 and GPIB. The STEP and GRADUAL modes allow easy setup on test sequence. Depending on CV/CC settings and load conditions, ADG series can operate as a current or voltage source. Its remote sensing feature can effectively reduce voltage drop caused by cable length and provides more flexibility on installation.

High Power

30-100kW

Low Ripple

lowest to

<0.1%-0.2%

Fast Transient Response

<4ms~12ms

High Efficiency

up to
>90%

High Voltage

12 voltage ranges, up to
1600V

High Current

up to
2000A

For Different Industries

41
models

NEW

DSP Technology

Highly improve performance and accuracy

■ Applications:



Renewable Energy/ EV



Aerospace & Defense



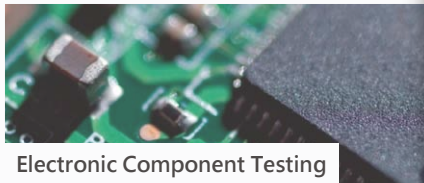
EMC Chamber



Research and Compliance Labs



Server Industry



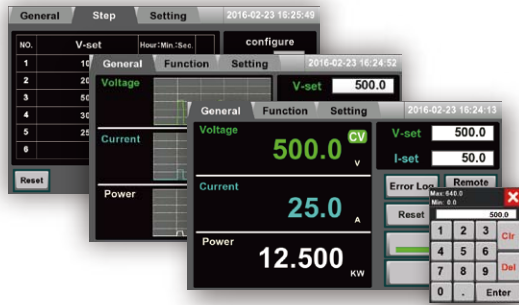
Electronic Component Testing



AC POWER CORP.

Key Features of ADG Series

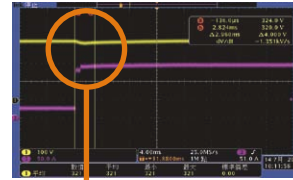
User-friendly HMI



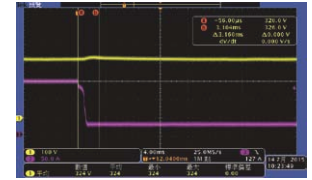
With 4.7 inches touched screen, ADG series has an intuitive HMI for easy operation and data display, such as voltage, current, power and etc.

Fast Transient Response

measurement: 2.96 ms



measurement: 3.16 ms

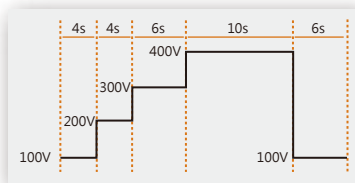


Measurement < 4-12 ms

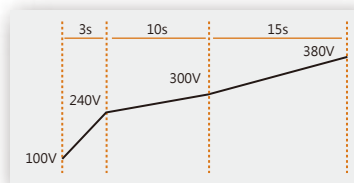
When output current demand changes rapidly in a large range, the output voltage will decrease or increase significantly in a short period of time. This type of current change sometimes affect the performance of EUT or test results. Having transient response time smaller than 4~12ms, ADG series can fast regulate output voltage to set voltage and minimize the effects to EUT.

Multiple Simulation Modes

STEP



GRADUAL



Increase the length of communication for remote control



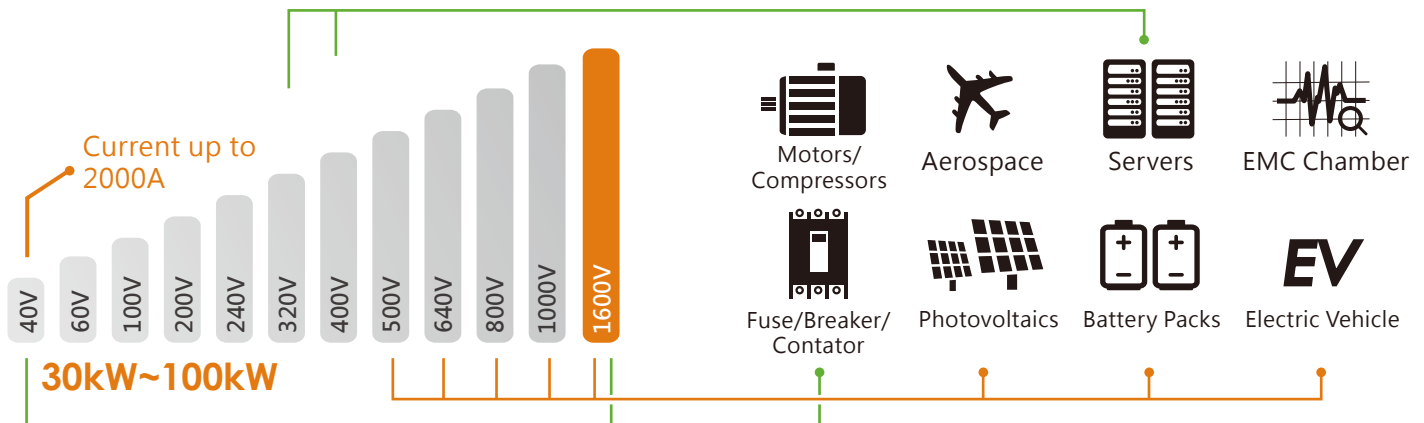
RS-485 Interface



STEP and GRADUAL modes allow users to easily set sequences of start / end voltage, run time and current for different testing purposes, or users can contact us to customize different simulation. The standard RS485 interface with Modbus protocol helps increase the length of communication. Optional RS232 and GPIB interfaces are also available.

High Output Voltage + Current = Different Applications

ADG series has 12 output voltage ranges and 41 models for different industries and applications.



ADG series has many output voltage ranges suitable for different market applications. Models over 640V output voltage are applicable for renewable energy, EV, and lithium battery industries. When it comes to circuit breakers, contactors or fuses that require high voltage or current, models with 2000A or 1600V can fulfill the power demands of this type of component testing. The 400V or 320V models can be applied to server related applications due to the increased needs for high voltage DC in data centers.

SPECIFICATIONS

30kW	Voltage	Current
ADG-P-40-750	0~40V	0~750A
ADG-P-60-500	0~60V	0~500A
ADG-P-100-300	0~100V	0~300A
ADG-P-200-150	0~200V	0~150A
ADG-P-240-125	0~240V	0~125A
ADG-P-320-94	0~320V	0~94A
ADG-P-400-75	0~400V	0~75A
ADG-P-500-60	0~500V	0~60A
ADG-P-640-47	0~640V	0~47A
ADG-P-800-38	0~800V	0~38A
ADG-P-1000-30	0~1000V	0~30A
ADG-P-1600-18	0~1600V	0~18A

50kW	Voltage	Current
ADG-P-40-1250	0~40V	0~1250A
ADG-P-60-834	0~60V	0~834A
ADG-P-100-500	0~100V	0~500A
ADG-P-200-250	0~200V	0~250A
ADG-P-240-208	0~240V	0~208A
ADG-P-320-156	0~320V	0~156A
ADG-P-400-125	0~400V	0~125A
ADG-P-500-100	0~500V	0~100A
ADG-P-640-78	0~640V	0~78A
ADG-P-800-63	0~800V	0~63A
ADG-P-1000-50	0~1000V	0~50A
ADG-P-1600-31	0~1600V	0~31A

80kW	Voltage	Current
ADG-P-40-2000	0~40V	0~2000A

100kW	Voltage	Current
ADG-P-100-1000	0~100V	0~1000A
ADG-P-320-312	0~320V	0~312A
ADG-P-640-156	0~640V	0~156A
ADG-P-1000-100	0~1000V	0~100A

30kW	ADG-P-40-750	ADG-P-60-500	ADG-P-100-300	ADG-P-200-150	ADG-P-240-125	ADG-P-320-94	ADG-P-400-75	ADG-P-500-60	ADG-P-640-47	ADG-P-800-38	ADG-P-1000-30	ADG-P-1600-18
50kW	ADG-P-40-1250	ADG-P-60-834	ADG-P-100-500	ADG-P-200-250	ADG-P-240-208	ADG-P-320-156	ADG-P-400-125	ADG-P-500-100	ADG-P-640-78	ADG-P-800-63	ADG-P-1000-50	ADG-P-1600-31
Input Voltage	3 Phase, 3 Wire+G 380 VAC / 400 VAC / 415 VAC / 440 VAC / 480 VAC ±10%, 3Φ											
Input Frequency	47 Hz - 63 Hz											
Input Power Factor	> 0.9 at maximum power											
Efficiency	>87%			>90%								
Line Regulation	<0.3%			<0.1%								
Load Regulation	<0.3%			<0.065%	<0.104%	<0.14%	<0.032%	<0.14%	<0.132%	<0.034%	<0.02%	<0.05%
Voltage Ripple (rms)	<0.5%			<0.26%	<0.19%	<0.16%	<0.13%	<0.13%	<0.109%	<0.07%	<0.05%	<0.08%
Voltage Noise (p-p)	<3.7%			<2%	<2%	<0.88%	<0.88%	<1.34%	<0.77%	<0.29%	<0.27%	<0.4%
Voltage Slew Rate *1	≤65ms			≤60ms	≤85ms			≤115ms			≤280ms	
Transient Response *2	≤4~12ms											
Voltage & Current Measurement Accuracy	<0.5% FS											
Voltage & Current Resolution	0.1V / 0.1A											
Remote Interface	RS-485 (Opt.: GPIB / RS-232)											
Protection	Vin OVP, Vin UVP, OVP, OCP, OTP											
OVP Adjustment Range	5%-115% from front panel											
OVP Accuracy	1% of full-scale output											
OCP Adjustment Range	5%-115% from front panel											
OCP Accuracy	1% of full-scale output											
Remote Sense Limits	3% maximum voltage drop from output to load (For models ≤1000 Vdc)											
Operating Temperature	0°C ~ 40°C											
Storage Temperature	-20°C ~ 70°C											
Isolation	Input to Enclosure 2000Vac											
Dimension (H*W*D)	41.5 x 23.6 x 31.5 inches /1050 x 600 x 800 mm											
Weight *3	30kW: approx. 496lbs / 225kg 50kW: approx. 511lbs / 232kg			30kW: approx. 412lbs / 187kg 50kW: approx. 423lbs / 192kg								

*1 For output voltage change from 5% to 90% at maximum power after output softstart *2 Recover to ±0.1% of regulated output with a 50% to 100% or 100% to 50% step load change

*3 Weight might be different due to option features or different input voltage. Please contact us for details. * All specifications are subject to change without notice.

** Please contact us for 80kW and 100kW specs. *** Above specifications are output voltage over 1%

About Preen

AC+DC Power Solution

Found in 1989, **Preen (AC Power Corp.)** is a leader in power supply and has been developing products based on the core technology of Power Conversion. We have one of the broadest product line of power supply, includes AC Power Source, DC Power Supplies, Power Supplies for Defense Industry, Renewable Energy Simulators, Line Conditioners and UPS.

- Programmable AC Power Source
- Regenerative Grid Simulator
- Programmable DC Power Supply
- Line Conditioner
- 400Hz/800Hz Power Supply for Aerospace



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