

2020

SHORT FORM CATALOG

AC + DC Power Solutions



- Programmable AC Power Source
- Programmable DC Power Supply
- Regenerative Grid Simulator

- Power Supply for Military & Aerospace
- Power Conditioner / AVR
- Solutions & Systems

Ideal DC Power Supplies for Renewable Energy, EV and Smart Grid Applications

ADG series family are programmable DC power supplies, including ADG-L series, ADG-P series and the latest ADG⁺ series. Its single-unit power ranges from middle and low power 4kW to high power 100kW. With more than 16 output voltage ranges, ADG series family offers output voltage up to 1600V and output current up to 2500A.

The ADG⁺ series options solar array simulation to program I-V curve. Featuring the PV simulation function and the ability to output high power in single unit makes this newly-released product unique in the market. It can also operate in parallel connection to achieve power expansion. The standard Emergency Stop button can meet the needs of laboratories and other testing fields.

The feature of high power and high accuracy of ADG series family is ideal for performance and aging testing, including renewable energy, EV, battery, DC/DC converters, inverters, electric products and contactors.



ADG-L series

160V~1000V

4kW

8kW

12kW

NEW



ADG⁺ series

40V~1600V

30kW

40kW

50kW

75kW

100kW

AC Power Source

Regenerative Grid Simulator / PAS Series

10kVA~2000kVA

RS-232

RS-485

USB

GPIO

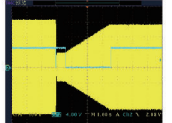
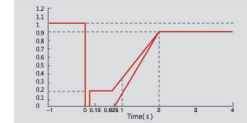
Ethernet

Touch Screen

RoHS Compliant CE



- Output Voltage : 0 V ~ 300V
- Output Frequency : 45Hz~65Hz /40Hz~70Hz (opt.)
- Touch Screen HMI
- Widely Used for Renewable Energy Industries
- Specialized for Standards :
 - * CNCA-CTS004
 - * IEC 62116
 - * GB/T 14549
 - * GB/T 19939
 - * IEEE 1547
 - * IEEE 1547.1
- Regenerative Function (Four Quadrants)
- Three Phase Independent Control
- Phase Angle Adjustment
- Step and Ramp Simulation
- Soft Start Function (opt.)
- LVRT Function



Programmable AC Power Supply / AFV Series

10kVA~2000kVA

RS-232

RS-485

GPIO

Ethernet

Touch Screen

RoHS Compliant CE



- Output Voltage : 0V ~ 300V
- Output Frequency : 45Hz ~ 65Hz/45Hz ~ 500Hz (opt.)
- Load Regulation : $\leq 1\%$
- THD : 2 %
- Efficiency : $\geq 90\%$
- Transient Response Time : $\leq 2\text{ms}$
- Step and Gradual Simulation
- Three Phase Independent Control(opt.)
- Phase Angle Adjustment(opt.)
- Soft Start Function(opt.)
- Touch Screen HMI
- Interface: RS232/RS485 (opt. GPIO/Ethernet)
- Higher Power Density and Better Reliability

AC Power Source Frequency Converter / AFC Series

3kVA~2000kVA

RoHS Compliant CE



- Output Voltage: 5V ~ 300V
- Output Frequency: 47Hz ~ 63Hz; 50Hz/60Hz fixed; 2&4 times frequency(opt.); 400Hz fixed(opt.)
- Load Regulation : $\leq 1\%$
- THD : $\leq 2\%$
- Efficiency : $\geq 90\%$
- Transient Response Time : $\leq 2\text{ms}$
- Digital LED Display
- One Button Shutdown
- High Accurate Measurement

Military Power Supply Ground Power Unit / AMV/AMF Series

500VA~400kVA

RS-485



- Adjustable Output Voltage : 115V/200V $\pm 10\%$
- Output Frequency : 350Hz~500Hz/400Hz fixed
- IP Level : up to IP54
- THD: down to 1%
- High Efficiency, Optimum Stability and Low Heat Dissipation
- Overload Capacity :
 - * 60 min for 120% load
 - * 60 sec for 150% load
 - * 15 sec for 200% load

* The color of interface stands for ● Standard ● Option

High Performance Programmable AC Power Source / AFV-P Series

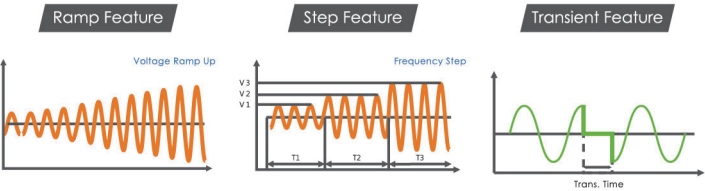
Ethernet USB RS-232 RS-485 GPIO Analog
Touch Screen RoHS Compliant CE TAIWAN EXCELLENCE 2018

600VA~5kVA



- Output Voltage : 0 ~ 310V
- Output Frequency :
A : 15 - 1000Hz B : 40 - 500Hz
- Load Regulation : $\leq 0.07\%$ F.S.
- THD : down to 0.3%
- Transient Generation (PLD)
- 2U : 600VA / 1250VA / 2500VA
4U : 5000VA
- Inrush Current Test: up to 4.5 peak/rms
- Transient Response Time: $\leq 300\mu s$
- Touch Screen HMI
- Remote Sensing Compensation

• Programmable Simulation Functions

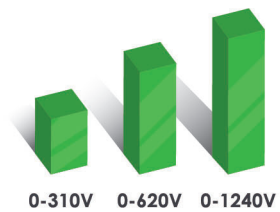


• Ideal for High Inrush Current EUT & Start / End Angle Setting



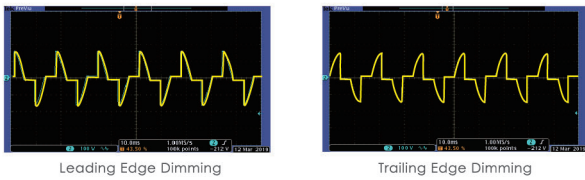
AFV-P series can provide optional inrush current up to 9 times of max. output current.

• High-Voltage Output 620V/1240V (Opt.)



AFV-P series can output optional 620V or 1240V to meet the high voltage requirements on simulations of wide input voltage variations (15%-20%), over-voltage and other extreme conditions.

• LED TRIAC Dimmer Simulation (Opt.)

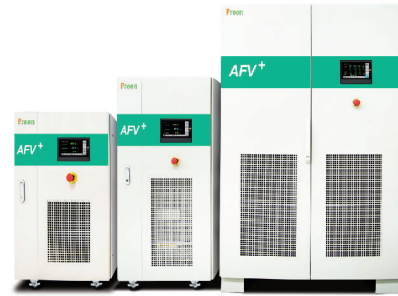


AFV-P series can simulate output of TRIAC dimmer with more accurate and effective waveform control compared to traditional TRIAC Dimming.

NEW High Power Programmable AC Power Source / AFV+ Series

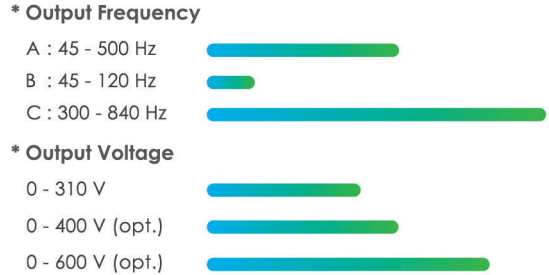
RS-232 RS-422 RS-485 Ethernet GPIO
Touch Screen RoHS Compliant CE

10kVA~2000kVA

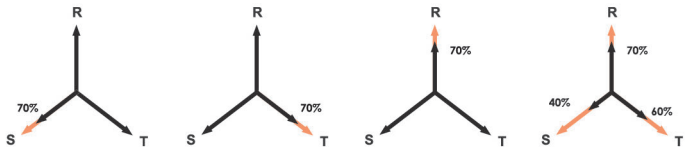


- Output Voltage : 0V ~ 310V
- Output Frequency :
A : 45-500Hz B : 45-120Hz C : 300-840Hz
- THD : $\leq 0.5\%$
- Load Regulation : $\leq 0.5\%$
- Transient Response Time : $\leq 1ms$
- Time Setting Resolution 0.1S
- Ideal for SEMI F47
- Three Phase Independent control
- Step & Ramp Simulation
- Options :
 - * Output Voltage: 400V/600V
 - * Phase Angle Adjustment
 - * Start Angle Setting
 - * SOFT START Feature
 - * Fast Response Version: 0.01S
 - * Overload Capacity: 200% 2sec, 150% 5sec, 125% 15sec

• Wider Frequency and Higher Voltage



• Three Phase Independent Adjustment



This function can simulate advanced power line disturbance, such as 3 phase voltage unbalanced or lost-phase, which can further meet up with testing standard of IEC61000-4-64.

All Around Solutions for AC Power Applications

Preen offers a complete range of AC power source with output power up to 2MVA in one unit which make Preen products suitable for various applications

Preen's AC power family features the industry's broadest range of output capacity from 0.5kW to 2000kW, which applied in renewable energy such as EV and PV, medical, aerospace, defense, communications, lighting, appliances, air conditioning, transportation, EMC chambers, academics, government agencies, etc.

Preen's products are designed to different applications. The programmable series, including AFV-P, PWF, AFV, and AFV⁺ series, are ideal for test and measurement applications. For basic power applications or conversion, Preen offers AFC or AMF (400Hz) series. And for models including the PAS series, AMV series and BPS series, they are designed to fulfill specific industries demands. The APS and APH series can be applied to diverse industries for power conditioning applications.



AFV-P series



AFV+ series

DC Power Supply

Programmable DC Power Supply / ADG-L Series

4kW~12kW

Analog

RS-232

RS-485

GPIB

Ethernet

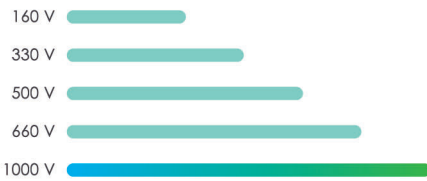
USB

Touch Screen **RoHS** Compliant **CE**



- Input Power Factor : $\geq 99\%$
- Output Voltage : up to 2000V
- Load Regulation : $\leq 0.3\%$
- Voltage Ripple : $\leq 0.07\%$
- Efficiency : $\geq 90\%$
- Reverse Current Protection(opt.)
- Step and Ramp Simulation
- Remote Sensing Compensation
- Series & Parallel configuration Available
- Touch Screen HMI
- Transient Response Time : $\leq 5\text{ms}$

• Wide Output Voltage & Series & Parallel Connection



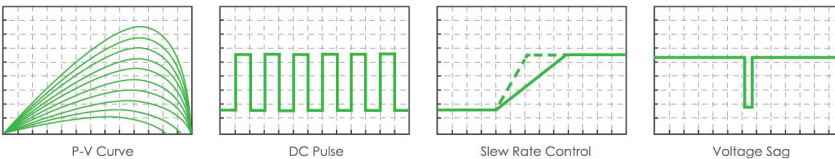
Preen's ADG-L series has 14 different models with three output power levels, 4kW, 8kW and 12kW. With up to 1000V output voltage and multiple Auto Range models. Series (max. 2 unit) & parallel (max. 5 unit) connections are available to achieve voltage & power expansion.

• Free Control Software and Various Communication Interfaces



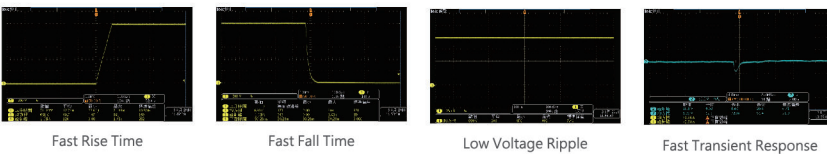
The ADG-L series can be controlled via the Preen Program to configure sophisticated sequences, save/recall STEPs, and generate test result reports. This intuitive control software makes remote programming no longer a difficult task. Also, various communication interfaces are supported: RS-232, RS-485, Ethernet, USB, GPIB and Analog Control.

• Programming Sequence & I-V Curve (opt.)



The built-in programming function of the ADG-L series has 99 STEPs for each of the 5 GROUPS. Users can set each STEP's output voltage, output current and time to generate consecutive voltage/current changes or set different rise/fall time. Optional I-V and P-V curve simulations are available.

• Industry-Leading Performance



The ADG-L series is designed for low ripple, high accuracy and tight regulation for simulating different DC voltages. With fast transient response and rise time, the ADG-L DC sources are ideal to test DUT behavior such as voltage sags, dropouts, ON/OFF tests and complex DC waveforms.

Rack Mount DC Power Supply / ADC Series

2kW~4kW



- Output Voltage : up to 600V
- Load Regulation : $\leq 0.05\%$
- Voltage Ripple : $\leq 0.15\%$
- Efficiency : up to 89%
- Transient Response Time : $\leq 1\text{ms}$
- Remote Sensing Compensation

High Power DC Power Supply / ADS Series

50A~4500A



RS-232

RS-485

GPIB

- Output Voltage : $28\text{V}\pm 10\%$ / $270\text{V}\pm 10\%$
- Load Regulation : $\leq 0.5\%$
- Voltage Ripple : $\leq 1\%$
- CC and CV Mode Supported
- Automatic Monitoring
- Widely Used for GPU and Military Unit

NEW High Power Programmable DC Power Supply / ADG+ Series

Analog RS-232 RS-485 GPIB Ethernet USB

30kW~300kW



- High Output Power up to 100kW. High Power Density Designed.
- Series & Parallel Configuration Available.
- Output Voltage : up to 2000V.
- Voltage Ripple : $\leq 0.05\%$, Voltage Accuracy: $\leq 0.1\%$
- Transient Response Time : $\leq 2-10ms$

Touch Screen RoHS Compliant CE

- CC/CV/CP Mode
- 7" Touch Screen HMI and Rotary Knob
- Emergency Stop Button for Quick Shutdown
- 12 Output Voltage Ranges and a Total of 41 Models
- Programmable Functions for Voltage and Current Simulations

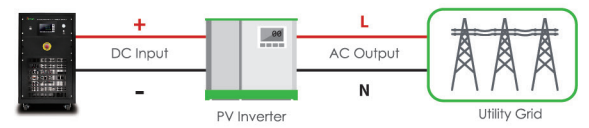
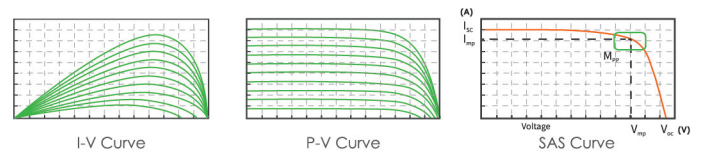
Series & Parallel Configuration Available for Output Power Expansion.



ADG+ Series can expand output power up to 300kW through parallel operation, making it unique in the market for featuring both PV simulation function and the ability to output high power in single unit.

Solar Array Simulation (Opt.)

1. Built-in SAS Mode and Capable of EN50530 Standard Testing.
2. I-V Curve for Simulation of Temperature and Irradiation.
3. Applicable of Maximum Power Point Tracking (MPPT) Operation.
4. Accurate Voltage and Current Measurement.



High Power Programmable DC Power Supply / ADG-P Series

RS-485 RS-232 GPIB Analog

30kW~100kW



- Input Power Factor : $\geq 90\%$
- Output Voltage : up to 2000V
- Load Regulation : down to 0.02%
- Voltage Ripple : down to 0.05%
- Efficiency : up to 90%
- Transient Response Time: down to 4ms

Touch Screen RoHS Compliant CE TAIWAN EXCELLENCE 2019

- Step and Gradual Simulation
- Remote Sensing Compensation
- Touch Screen HMI



Power Conditioner

Solid State Power Conditioner / APS Series

1kVA~300kVA



- Input Voltage Range : $\pm 18\%$ / $\pm 25\%$ (opt.)
- Input Power Factor : $\geq 95\%$
- Voltage Regulation : $\pm 2\%$
- THD : $\leq 1\%$
- Efficiency : $\geq 98\%$
- Transient Response Time : $\leq 4ms$

Inductive Automatic Voltage Regulator / APH Series

10kVA~1000kVA



- Input Voltage Range : -13% to 17% - 22% to 30% (opt.)
- Voltage Regulation: $\pm 2\%$
- THD : $\leq 1\%$
- Efficiency : $\geq 97\%$
- Superior Durability and High Reliability

AC Power Corp.

Specialized in power electronics, Preen (AC Power Corp.) has been developing products based on its core technology of Power Conversion. Product line includes AC Power Sources, DC Power Supplies, Power Supplies for Defense Industry, Renewable Energy Simulators, Line Conditioners and UPS. Boasting one of the broadest product line in the industries, Preen specializes in High Power Source and has developed AC power source up to 2MVA with high power density.

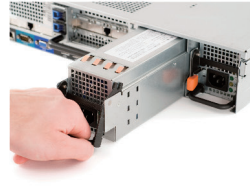
Applications



Renewable Energy



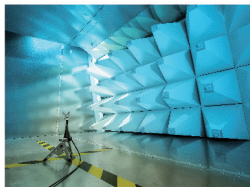
Laboratory



Switching Power Supply



Electric Vehicle



EMC Chamber



Home Appliance



Aircraft Manufacturing



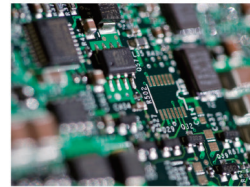
Medical Equipment



ATE System



Airport Apron / Hangar



Electronics



Motor / Engine



Communication Equipment



Transport System



Control Room/ Data Center



Defense System

Preen[®]
AC POWER CORP



Taiwan

Address: 3F, No.200, Gangqian Rd., Neihu District,
Taipei City 11494, Taiwan
TEL : +886-2-2627-1899 FAX : +886-2-2627-1879

USA

Address: 192 Technology Drive, Suite S, Irvine, CA 92618
TEL : +1-949-988-7799

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