Full-Range DC Power Supply for Your Needs

Wide voltage range from 0-30V to 0-2000V, with current capability up to 2550A

Designed for demanding applications, the ADG-L series delivers high-density power with exceptional stability and accuracy. Its modular design allows for scalable power up to 75kW, making it ideal for a wide range of industries.



ADG-L series

USB

Programmable DC Power Supply

Interfaces



QR Code

Product	Product
Info.	Video

Press and as

차 NEW

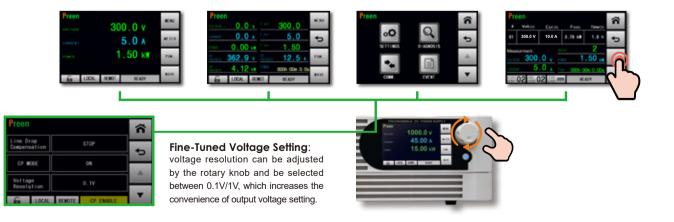
Output Power 5kW/10kW/15kW RoHS CE

Preen's new ADG-L series is a programmable DC power supply with high power density, low noise, and tight regulation. The combination of DSP and PWM technologies has enabled significant advances in stability and measurements. The ADG-L series includes 31 models with 5kW, 10kW and 15kW maximum output powers and several Auto Range models to provide a higher output current at lower output voltage. With CV/CC/CP modes and its high voltage and high power features, the ADG-L series is an ideal DC power for applications on photovoltaic (PV), electric vehicle (EV), battery charge simulation, fuse, and contactors.

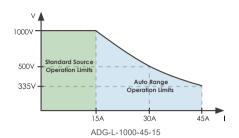
Parallel configuration is available for higher output level. The ADG-L series is operated via the 5" intuitive touch screen or the rotary knob to quickly access measurements, setting parameters, and configurations. The unit can also be controlled via standard RS-232, RS-485, Analog, Ethernet, USB and Analog remote interfaces, or through optional GPIB interface. The builtin simulation function allows devices to be tested on voltage dropouts, spikes and other repetitive testing for voltage and current.

Intuitive Touch Screen and Rotary Knob

The ADG-L series equips 5" touch screen and rotary knob to provide intuitive display and easy-to-use control. Users can quickly access output settings, measurements, sequences and system configurations from the touch screen. Sophisticated sequences can not only be set from the PC easily but also can be set from the touch screen.



Auto Range Functions



Auto range feature can generate a higher output current at lower output voltage, or a higher output voltage at lower output current. This feature is an ideal solution for both high current/low voltage and low voltage/high current DUT, and makes one unit to cover a wide range of applications to further save cost and space.

Complimentary Control Software and Various 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.

Optional

GPIB

The DC power supply is equipped with RS-232/RS-485, Ethernet, USB and Analog for standard interfaces. Optional GPIB are also available for better integrations with automatic test systems and the needs of industry 4.0.





The ADG-L series delivers highly flexible DC power solutions, ranging from 0-30V to $0-2000V^{*1}$ with up to $2550A^{*2}$ output current. Ideal for testing in the renewable energy and electric vehicle components, this series offers precise voltage and current control for various applications.

High Power Density: 15kW in 3U



15kW

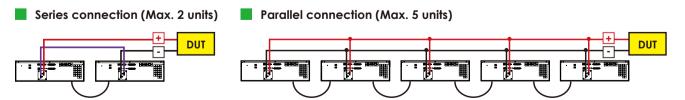


30kW

Employing PWM technology and DSP-based control, Preen's ADG-L series DC power supply has 15kW available only in 3U chassis, and with parallel configuration, 30kW only has 6U height.

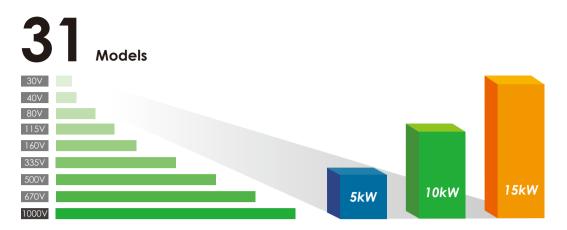
The rack-mount enclosure is designed to accommodate a wide range of applications, especially for automatic test systems and integrations.

Multiple Connections



The single unit power of ADG-L series can reach up to 15kW, and can be expanded to 75kW through parallel connection, or can output up to 2000V through series connection. Each unit can be set as Master or Slave. The user can freely combine ADG-L series according to the load test requirements, thereby increases flexibility of the application.

*1 via series connection *2 via parallel connection



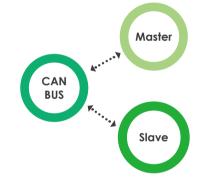
Preen's ADG-L series has 19 different models with three output power levels, 5kW, 10kW and 15kW. With up to 1000V output voltage and multiple Auto Range models, the ADG-L series covers a wide range of applications including electric vehicle, photovoltaic, battery, DC/DC converters and electronic products.

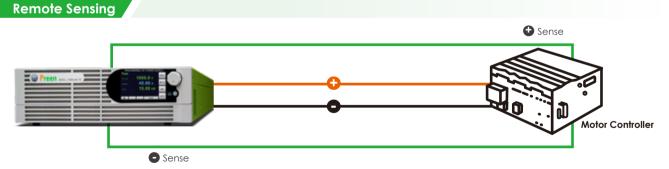
Master/Slave Parallel Operation





Through a simple and fast setup, the ADG-L series can generate higher power by connecting identical models in a Master/Slave parallel operation. Users only need to control the master unit for multiple units' setup and readbacks. The master unit automatically calculates the parameters and downloads data to slave units to make programming easier and current sharing more precise.





In many laboratories and factories, the DC power supply is located in a certain distance away from the DUT, and sometimes it causes voltage drop due to the resistance of the wires. The ADG-L series' Remote Sensing function is able to compensate voltage drops and provide a stable output voltage.

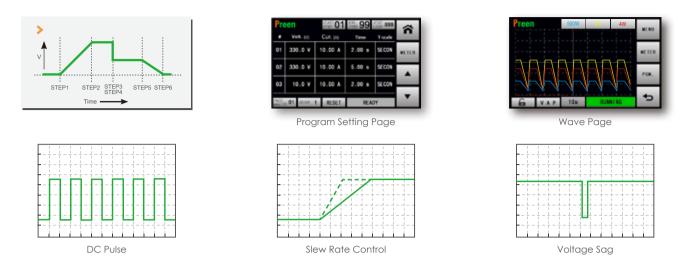
Screen Lock Password Function

INPLIT		ŝ	# Velt. co	AK. 14	T-stafe
PASSWORD		-	01 330.0 V	10.00 A .00	SECON NETER
INT LOCK TIME	12288		02 330.0 V		SECON
		1000	03 10.0 V		SECON

Screen Lock

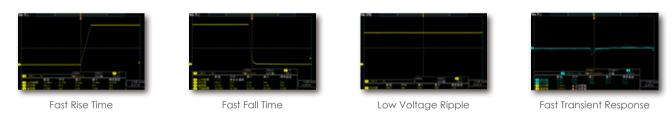
In order to prevent the operator from changing the set parameters by mistake, the new Screen Lock Password function is added on ADG-L series, so that the operator can only perform the output of the device, and only authorized personnel has the password to unlock the screen and edit parameters.

Programming Sequences and Simulations



The built-in programming function of the ADG-L series has four types: Mode 1 : Group 25 / Step 16, Mode 2 : Group 10 / Step 40, Mode 3 : Group 5 / Step 80, Mode 4 : Group 2 / Step 200. Users can set each STEP's output voltage, output current and time to generate consecutive voltage/current changes or set different rise/fall time. This built-in function and the ADG-L series' control software allow users to create complex DC waveform without sophisticated coding. Making programming the DC power supply an easy task.

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 series' DC sources are ideal to test DUT behavior to voltage sags, dropouts, ON/OFF tests and complex DC waveforms.

Multiple Ways of AC Input Connections

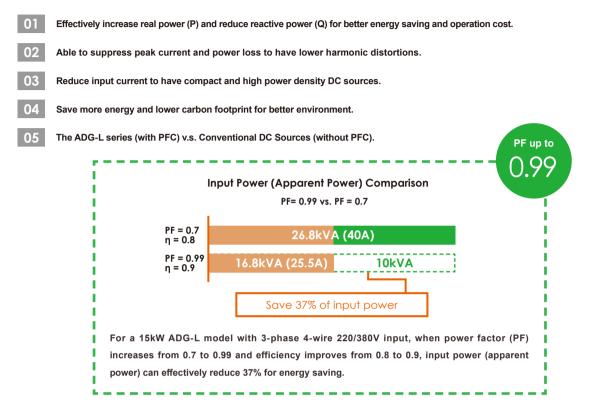
Conventional DC power supplies have only one type of AC input range and one way of input wirings. Different from most of high power DC power supply, the ADG-L series models offer more than two ways of input connections. For example, the 10kW models can have single phase or three phase input without factory modifications. This feature provides flexibility and convenience for users to operate the unit in different environments.

Reverse Current Protection Module (opt.)

ADG-L series has optional Reverse Current Protection Module. When the DUT generates the reverse energy flowing back to the output of ADG-L series it can effectively block the reverse current to protect ADG-L series from possible damages.

0.99 Input Power Factor

The ADG-L series is equipped with active Power Factor Corrector (PFC) to enhance input PF up to industry-leading 0.99, which helps reducing the interference on the grid.



PANEL DESCRIPTION







- 1. Power Switch
- 2. Touch Screen HMI
- 3. Rotary Knob
- 4. Output / Reset Button
- 5. DC Negative Output Terminal
- 6. DC Positive Output Terminal
- 7. Remote Sense Connector
- 8. USB Interface (for firmware update)
- 9. Serial and Parallel Switch
- 10. CANBUS Terminal Resister Switch
- 11. Accessory Power Outlet (5V&12V)

- 12. Analog Interface
- 13. Communication Interface :
 - USB
 - RS-232/RS-485(SCPI&MODBUS)
 - Ethernet
 - GPIB(opt.)
- 14. Input Terminals
- 15. System Comm. (Master-Slave Parallel Interface)

Power Supply

ver Conditioner

ORDERING INFORMATION

ADG-L Series (5kW-15kW)

Model Number	Description
ADG-L-30-170	Programmable DC Power Supply(5kW/30V/170A)
ADG-L-40-125	Programmable DC Power Supply(5kW/40V/125A)
ADG-L-80-62	Programmable DC Power Supply(5kW/80V/62.5A)
ADG-L-80-170-5	Programmable DC Power Supply(5kW/80V/170A) (Auto Range Model)
ADG-L-115-45	Programmable DC Power Supply (5kW/115V/45A)
ADG-L-160-32	Programmable DC Power Supply (5kW/160V/32A)
ADG-L-335-15	Programmable DC Power Supply (5kW/335V/15A)
ADG-L-30-340	Programmable DC Power Supply(10kW/30V/340A)
ADG-L-40-250	Programmable DC Power Supply(10kW/40V/250A)
ADG-L-80-125	Programmable DC Power Supply(10kW/80V/125A)
ADG-L-80-340-10	Programmable DC Power Supply(10kW/80V/340A) (Auto Range Model)
ADG-L-335-45-5	Programmable DC Power Supply (5kW/335V/45A) (Auto Range Model)
ADG-L-115-90	Programmable DC Power Supply (10kW/115V/90A)
ADG-L-160-63	Programmable DC Power Supply (10kW/160V/63A)
ADG-L-335-30	Programmable DC Power Supply (10kW/335V/30A)
ADG-L-335-90-10	Programmable DC Power Supply (10kW/335V/90A) (Auto Range Model)
ADG-L-500-20	Programmable DC Power Supply (10kW/500V/20A)
ADG-L-670-15	Programmable DC Power Supply (10kW/670V/15A)
ADG-L-670-45-10	Programmable DC Power Supply (10kW/670V/45A) (Auto Range Model)
ADG-L-30-510	Programmable DC Power Supply(15kW/30V/510A)
ADG-L-40-375	Programmable DC Power Supply(15kW/40V/375A)
ADG-L-80-187	Programmable DC Power Supply(15kW/80V/187.5A)
ADG-L-80-510-15	Programmable DC Power Supply(15kW/80V/510A) (Auto Range Model)
ADG-L-115-135	Programmable DC Power Supply (15kW/115V/135A)
ADG-L-160-94	Programmable DC Power Supply (15kW/160V/94A)
ADG-L-335-45	Programmable DC Power Supply (15kW/335V/45A)
ADG-L-335-135-15	Programmable DC Power Supply (15kW/335V/135A) (Auto Range Model)
ADG-L-500-30	Programmable DC Power Supply (15kW/500V/30A)
ADG-L-670-23	Programmable DC Power Supply (15kW/670V/23A)
ADG-L-1000-15	Programmable DC Power Supply (15kW/1000V/15A)
ADG-L-1000-45-15	Programmable DC Power Supply (15kW/1000V/45A) (Auto Range Model)
ADG-L-008	Multiple Units Connection Cord DB25 (Male*2) 50 cm
ADG-L-013	GPIB Interface Board
ADG-L-014	Reverse Current Protection Module
ADG-L-015	I-V Curve Simulation and Remote Control Software
ADG-L-017	Input Voltage 3Ø4W+G 340-528 Vac
ADG-L-018	Remote Control Box
ACCS-001	USB to RS-485 converter +RS-232/RS-485 Cable M-F type (2M)
ACCS-003	RS-232/RS-485 Cable M-F type (2M)

*For 30V, 40V, 80V models, please contact us for input voltage options.

SPECIFICATIONS

ADG-L Series (5kW)

ADG-L Ser												
Model		ADG-L- 30-170	ADG-L- 40-125	ADG-L- 80-62	ADG-L- 80-170-5	ADG-L- 115-45	ADG-L- 160-32	ADG-L- 335-15	ADG-L- 335-45-5			
Output Powe	r	5kW	5kW	5kW	5kW	5kW	5kW	5kW	5kW			
NPUT							10 2004	C 197 264 VAC				
nput Voltage	9		1Ø 2W+G 1	87-264 VAC		1Ø 2W+G 187-264 VAC 3Ø3W+G 187-264 VAC 3Ø4W+G 340-460 VAC						
nput Current	•					30A						
nput Frequei	ncy				47	Hz-63 Hz						
ower Factor			≥ 0.99 at r	nax. power		≥ 0.99 at max. power						
DUTPUT												
oltage		0~30V	0~40V	0~80V	0~80V	0 - 115V	0 - 160V	0 - 335V	0 - 335V			
Current		0~170A	0~125A	0~62.5A	0~170A	0 - 45A	0 - 32A	0 - 15A	0 - 45A			
oltage Ripp	le (RMS) ^{*1}	≤0.15% F.S.	≤0.1% F.S.	≤ 0.05% F.S.	≤ 0.08% F.S.	≤ 0.25% F.S.	≤ 0.2% F.S.	≤ 0.08% F.S.	≤ 0.08% F.S.			
oltage Ripp peak to peo		≤2% F.S.	≤1.5% F.S.	≤ 0.8% F.S.	≤ 0.8% F.S.	≤ 1.6% F.S.	≤ 1.6% F.S.	≤ 0.8% F.S.	≤ 0.8% F.S.			
oltage Line	Regulation	≤0.1% F.S.	≤0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.			
/oltage Load egulation ^{*2}	ł	≤0.1% F.S.	≤0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.3% F.S.	≤ 0.3% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.			
Current Rippl	e (RMS)	≤0.05% F.S.	≤ 0.08% F.S.	≤0.1% F.S.	≤ 0.05% F.S.	≤ 0.25% F.S.	≤ 0.2% F.S.	≤ 0.15% F.S.	≤0.15% F.S.			
Current Line I	Regulation	≤0.05% F.S.	≤0.05% F.S.	≤0.05% F.S.	≤ 0.05% F.S.	≤ 0.03% F.S.	≤ 0.03% F.S.	≤ 0.03% F.S.	≤0.03% F.S.			
Current Load	Regulation	≤0.15% F.S.	≤0.15% F.S.	≤ 0.15% F.S.	≤ 0.15% F.S.	≤ 0.2% F.S.	≤ 0.2% F.S.	≤ 0.2% F.S.	≤0.15% F.S.			
	Rise Time	≤8ms	≤8ms	≤ 15ms	≤ 15mS	≤ 25ms	≤ 25ms	≤ 30ms	≤ 30ms			
lew Rate ^{*3}	Fall Time (Full Load)	≤ 3ms	≤3ms	≤ 8ms	≤ 8mS	≤ 30ms	≤ 30ms	≤ 45ms	≤ 45ms			
	Fall Time (No Load)					≤ 3s						
ransient Res	ponse ^{*4}					≤ 5ms						
Programming	g & Measureme	nt										
/oltage Progr Accuracy			≤ 0.08% F	.S. +0.01V		≤ 0.08% F.S. +100mV						
Voltage Mea				.S. +0.01V		≤ 0.08% F.S. +100mV						
/oltage Reso Current Progr			10	mV				100mV				
Accuracy Current Meas				S. +0.1A				% F.S. +60mA				
Accuracy Current Resol				.S. +0.1A 1A		≤ 0.2% F.S. +60mA 10mA						
ower Progra								-				
Accuracy Power Measu				% F.S.		≤ 0.4% F.S.						
Accuracy			≤ 0.30	% F.S.		≤ 0.4% F.S.						
Power Resolu			0.0	1kW				0.01kW				
General Spe	cs											
fficiency*5		≥ 87% at max. power	≥ 88% at max. power	≥ 90% at r	max. power	≥ 87% at n	nax. power	≥ 90% a	90% at max. power			
nterfaces				Sta		S-485, Ethernet, U tion: GPIB	SB, Analog					
Analog Input V & I)	Control	0-5V, 4-20mA, A	ccuracy : 1% F.S. 59	(at output rated vo %)	ltage & current ≥	0-5V, Accuracy : 2%						
Analog Outp (V & I)	ut Monitor		0-5V, Accura	acy : 2% F.S.		-						
lemote Sens	ing					≤ 5V						
Operating Te	mperature				0'	°C ~ 40°C						
torage Temp	perature				-20)°C ~ 70°C						
rotections		OVP \ OCP \ O	PP、OTP、Vin O Er	V ∖ LDC OV ∖ Ren ror	note Error FAN	OVP \ OC	P · OPP · OTP ·	Vin OV 、Vin Unbal	ance 、LDC OV			
OVP Range			0 - 110)% F.S.			0 -	110% F.S.				
OCP Range			0 - 110)% F.S.			0 -	110% F.S.				
			0 - 110)% F.S.			0 -	110% F.S.				
JPP kange						132 x 442 x 692 mm / 5.2 x 17.4 x 27.2 inch						
OPP Range Dimension (H	IxWxD)	132	x 442 x 731.5 mm	/ 5.2 x 17.4 x 28.8	linch		132 x 442 x 692 m	17.4 x 27	2 inch			

*1 When output current is ≥ 2% of rated current. *2 The load variation is 0-100% at rated input voltage. *3 The time required for the output voltage to change from 10% to 90% or 90% to 10% at full scale. *4 Under nominal AC input, recovers to ±1% of full-scale output voltage for a 50% to 100% or 100% to 50% load change. *5 When voltage output is at the max. voltage *6 weight tolerance is within ±10% * The above is the specification when the output voltage and current are 1% or more

** The company's products are constantly being developed and improved, and the specifications are subject to change without prior notice.

SPECIFICATIONS

ADG-L Series (10kW)

Model		ADG-L- 30-340	ADG-L- 40-250	ADG-L- 80-125	ADG-L- 80-340-10	ADG-L- 115-90	ADG-L- 160-63	ADG-L- 335-30	ADG-L- 335-90-10	ADG-L- 500-20	ADG-L- 670-15	ADG-L- 670-45-10			
Output Power		10kW	10kW	10kW	10kW	10kW	10kW	10kW	10kW	10kW	10kW	10kW			
INPUT		10111	TORET	lotti	TOILUT	Toktr	Ioniti	TORT	10111	TORET	Tokiti	Tokti			
Input Voltage			A: 3Ø4W+G B: 3Ø3W+G			1Ø 2W+G 187-264 VAC 3Ø3W+G 187-264 VAC 3Ø4W+G 340-460 VAC (Option 3Ø4W+G 340-528 VAC)									
Input Current			A: 3ØY B: 3ØΔ			1Ø : 60A 3ØΔ: 35A 3ØY : 19A									
Input Frequenc	y						47 Hz-63 H	łz							
Power Factor						≥ 0.99 at max. power									
OUTPUT															
Voltage		0~30V	0~40V	0~80V	0~80V	0 - 115V	0 - 160V	0 - 335V	0 - 335V	0 - 500V	0 - 670V	0 - 670V			
Current		0~340A	0~250A	0~125A	0~340A	0 - 90A	0 - 63A	0 - 30A	0 - 90A	0 - 20A	0 - 15A	0 - 45A			
Voltage Ripple	(RMS) ^{*1}	≤ 0.25% F.S.	≤0.15% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤ 0.3% F.S.	≤ 0.3% F.S.	≤ 0.15% F.S.	≤0.15% F.S.	≤ 0.08% F.S.	≤0.08% F.S.	≤0.08% F.S.			
Voltage Ripple peak) ^{*1}	(peak to	≤4% F.S.	≤3% F.S.	≤1.5% F.S.	≤2% F.S.	≤ 2.5% F.S.	≤ 2.5% F.S.	≤ 1.6% F.S.	≤ 1.6% F.S.	≤ 0.8% F.S.	≤0.8% F.S.	≤0.8% F.S.			
Voltage Line Re	gulation	≤0.1% F.S.	≤0.1% F.S.	≤0.1%F.S.	≤0 .1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.03% F.S.	≤ 0.03% F.S.	≤ 0.03% F.S.			
Voltage Load F	Regulation ^{*2}	≤ 0.1% F.S.	≤ 0.1% F.S.	≤0.1% F.S.	≤ 0.1% F.S.	≤ 0.3% F.S.	≤ 0.3% F.S.	≤ 0.3% F.S.	≤ 0.3% F.S.	≤0.05% F.S.	≤ 0.05% F.S.	≤ 0.05% F.S.			
Current Ripple	(RMS)	≤.05% F.S.	≤0.05% F.S.	≤0.08% F.S.	≤0.05% F.S.	≤ 0.3% F.S.	≤ 0.2% F.S.	≤ 0.3% F.S.	≤ 0.2% F.S.	≤ 0.5% F.S.	≤ 0.5% F.S.	≤ 0.25% F.S.			
Current Line Re	gulation	≤ 0.05%F.S.	≤0.05% F.S.	≤ 0.05% F.S.	≤ 0.05% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.2% F.S.	≤ 0.2% F.S.	≤ 0.05% F.S. +50mA	≤ 0.05%F.S. +50mA	≤ 0.05%F.S. +50mA			
Current Load R		≤ 0.15% F.S.	≤ 0.15% F.S.	≤0.15% F.S.	≤ 0.15% F.S.	≤ 0.2% F.S.	≤ 0.2% F.S.		≤ 0.3% F.S.	≤0.25% F.S.	≤ 0.25% F.S.	≤ 0.25% F.S.			
	Rise Time	≤ 8ms	≤ 8ms	≤ 15ms	≤ 15ms	≤ 25ms	≤ 25ms	≤ 30ms	≤ 30ms	≤ 55ms	≤ 60ms	≤ 60ms			
Slew Rate ^{*3}	Fall Time (Full Load) Fall Time	≤ 3ms	≤ 3ms	≤ 8ms	≤ 8ms	≤ 30ms	≤ 30ms	≤ 45ms	≤ 45ms	≤ 45ms	≤ 45ms	≤ 45ms			
	(No Load)	≤ 3s													
Transient Respo	onse ^{*4}						≤ 5ms								
	& Measurement														
Voltage Program Accuracy	nming		≤ 0.08% F.	S. +0.01V				\$	6.08% F.S. +	100mV					
Voltage Measu Accuracy	rement	≤ 0.08% F.S. +0.01V ≤ 0.08% F.S. +100mV													
Voltage Resolu	tion		10r	nV					100mV						
Current Progra Accuracy			≤ 0.2% F.	S. +0.1A		≤ 0.3% F.S. +60mA									
Current Measu Accuracy	rement		≤ 0.2% F.	S. +0.1A		≤ 0.3% F.S. +60mA									
Current Resolut	ion	·	0.1	IA		10mA									
Power Program Accuracy	iming		≤ 0.3%	6 F.S.		≤ 0.4% F.S.									
Power Measure	ement		≤ 0.3%	6 F.S.		≤ 0.4% F.S.									
Accuracy Power Resolution		-	0.01			0.01kW									
General Specs			0.01	KVV					0.01KVV						
Efficiency ^{*5}		≥ 87% at max. power	≥ 88 max. r		≥ 90% at max. power	-	'% at power)% at power	≥ 87% at max. power					
Interfaces			indx. j			andard: RS-23		thernet, USB,		mux. power	pc				
Analog Input (V & I)	Control		, Accuracy : oltage & cu		at output rated				-5V, Accurac	sy : 2%					
Analog Outp (V & I)	ut Monitor		-5V, Accura						-						
Remote sense compensation							≤ 5V								
Operating Tem	perature						0°C ~ 40°C	C							
,							-20°C ~ 70°								
Storage Tempe			OCP、OPP 、LDC OV、		n OV \ ror \ FAN Error				OTP \ Vin OV	· Vin Unbalance	• LDC OV				
Storage Tempe Protections						OVP \ OCP \ OPP \ OTP \ Vin OV \ Vin Unbalance \ LDC OV									
-						0 - 110% F.S.									
Protections							0 - 110% F.								
Protections OVP Range								.S.							
Protections OVP Range OCP Range	NxD)		x 731.5 mm /	/ 5.2 x 17.4	x 28.8 inch		0 - 110% F.	.S. .S.	692 mm / 5.2	x 17.4 x 27.2 ind	ch				

*1 When output current is ≥ 2% of rated current. *2 The load variation is 0-100% at rated input voltage. *3 The time required for the output voltage to change from 10% to 90% or 90% to 10% at full scale. *4 Under nominal AC input, recovers to ±1% of full-scale output voltage for a 50% to 100% or 100% to 50% load change. *5 When voltage output is at the max. voltage *6 weight tolerance is within ±10% * The above is the specification when the output voltage and current are 1% or more ** The company's products are constantly being developed and improved, and the specifications are subject to change without prior notice.

SPECIFICATIONS

ADG-L Series (15kW)

Model		ADG-L- 30-510	ADG-L- 40-375	ADG-L- 80-187	ADG-L- 80-510-15	ADG-L- 115-135	ADG-L- 160-94	ADG-L- 335-45	ADG-L- 335-135-15	ADG-L- 500-30	ADG-L- 670-23	ADG-L- 1000-15	ADG-L-		
Output Power		15kW	15 67 6	15kW	15kW	15kW	15kW	15kW	15kW	15kW	15kW	15kW	15kW		
INPUT						Ioniti	TORT	Tolitt	TOILT	Ioniti	Iolitt	Ioniti	Total		
Input Voltage		A: 3Ø4W+G 340-460 Vac B: 3Ø3W+G 187-264 Vac				1Ø 2W+G 187-264 VAC 3Ø3W+G 187-264 VAC 3Ø4W+G 340-460 VAC (Option 3Ø4W+G 340-528 VAC)									
Input Current				Y : 30A ∆ : 52A		1Ø : 90A 3ØΔ: 52A 3ØY : 30A									
Input Frequence	су					47 Hz-63 Hz									
Power Factor						≥ 0.99 at max. power									
OUTPUT										I					
Voltage		0~30V	0~40V	0~80V	0~80V	0 - 115V	0 - 160V	0 - 335V	0 - 335V	0 - 500V	0 - 670V	0 - 1000V	0 - 100		
Current		0~510A	0~375A	0~187.5A	0~510A	0 - 135A	0 - 94A	0 - 45A	0 - 135A	0 - 30A	0 - 23A	0 - 15A	0 - 45		
Voltage Ripple (RMS) ^{*1}		≤0.25% F.S.	≤0.2% F.S.	≤0.15% F.S.	≤0.15% F.S.	≤0.3% F.S.	≤0.3% F.S.	≤0.15% F.S.	≤0.15% F.S.	≤0.15% F.S.	≤0.15% F.S.	≤0.1% F.S.	≤0.1% F		
Voltage Ripple (peak to peak		≤ 4% F.S.	≤ 3% F.S.	≤ 1.5% F.S.	≤ 2% F.S.	≤ 1.6% F.S.	≤1.6% F.S.	≤ 1% F.S.	≤ 1% F.S.	≤0.8% F.S.	≤0.8% F.S.	≤0.5% F.S.	≤0.5% F		
Voltage Line R		≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤ 0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F		
Voltage Load	-	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.2% F.S.	≤0.2% F.S.	≤0.2% F.S.	≤0.2% F.S.	≤0.2% F.S.	≤0.2% F.S.	≤0.1% F.S.	≤0.1% F		
Current Ripple	(RMS)	≤ 0.05% F.S.	≤ 0.05% F.S.	≤ 0.08% F.S.	≤ 0.05% F.S.	≤0.1% F.S.	≤0.1% F.S.	≤0.15% F.S.	≤0.1% F.S.	≤0.25% F.S.	≤0.25% F.S.	≤0.5% F.S.	≤0.25% F		
Current Line Re	egulation	≤ 0.05% F.S.	≤ 0.05% F.S.	≤ 0.05% F.S.	≤ 0.05% F.S.	≤0.05% F.S. +50mA	≤ 0.05% F.S. +50mA	≤ 0.05% F.S. +50mA	≤ 0.05% F.S. +50mA	≤ 0.05% F.S. +50mA	≤ 0.05% F.S. +50mA	≤ 0.05% F.S.	≤ 0.05 F.S.		
Current Load R	Regulation	≤ 0.15% F.S.	≤0.15% F.S.	≤ 0.15% F.S.	≤ 0.15% F.S.	≤ 0.1% F.S.	≤ 0.1% F.S.	≤ 0.2% F.S.	≤ 0.2% F.S.	≤ 0.3% F.S.	≤ 0.3% F.S.	≤ 0.3% F.S.	≤ 0.3% F		
	Rise Time	≤ 8ms	≤ 8ms	≤ 15ms	≤ 15ms	≤ 25ms	≤ 30ms	≤ 30ms	≤ 30ms	≤ 55ms	≤ 60ms	≤ 90ms	≤ 90m		
Classe D arka *3	Fall Time	≤ 3ms	≤ 3ms	≤ 8ms	≤ 8ms	≤ 30ms	≤ 45ms	≤ 45ms	≤ 45ms	≤ 45ms	≤ 45ms	≤ 40ms	≤ 40m		
Slew Rate ^{*3}	(Full Load) Fall Time (No Load)							3s							
Transient Resp							< 5	ims							
	& Measurement						_ 0								
Voltage Progra			< 0.08% F	5.S. +0.01V					< 0.08% E	S. +100mV					
Accuracy Voltage Meas Accuracy	urement			5.S. +0.01V		≤ 0.08% F.S. +100mV									
Voltage Resolu	ution		10	mV		100mV									
Current Progra Accuracy	amming		≤ 0.2% F	5.S. +0.1A		≤ 0.4% F.S. +60mA									
Current Measu Accuracy	urement		≤ 0.2% F	5.S. +0.1A		≤ 0.4% F.S. +60mA									
Current Resolu			0.	1A		10mA									
Power Program Accuracy	nming		≤ 0.3	% F.S.		≤ 0.4% F.S.									
Power Measure Accuracy	rement		≤ 0.3	% F.S.		≤ 0.4% F.S.									
Power Resoluti	ion		0.0	1kW		0.01kW									
General Specs	s														
Efficiency*5		≥ 87% at max. power	≥ 88% at max. power	≥ 90% at r	nax. power	≥ 87% at n	nax. power	≥ 90% at n	nax. power	≥ 87% at max. power	≥ 90)% at max. po	ower		
Interfaces						Standard: RS-232, RS-485, Ethernet, USB, Analog Option: GPIB									
Analog Input (V & I)				cy : 1% F.S. current ≥ 5		0-5V, Accuracy : 2%									
Analog Outp	out Monitor		0-5V, Accura	acy : 2% F.S						-					
(V & I)						≤ 5V									
Remote sense	compensation					0°C ~ 40°C									
Remote sense Operating Terr	nperature														
Remote sense Operating Tem Storage Tempo	nperature						-20°C	~ 70°C							
Remote sense Operating Terr Storage Tempe Protections	nperature				OVP	、OCP ∖ OPP	-20°C • OTP • Vin	∼ 70°C OV ∖ Vin Unl	palance 、LD	OC OV					
Remote sense Operating Tem Storage Tempe Protections OVP Range	nperature				OVP	、OCP 、OPP	-20°C • OTP • Vin 0 - 110	~ 70℃ OV ∖ Vin Unł 0% F.S.	oalance ∖ LD	OC OV					
Remote sense Operating Terr Storage Tempo Protections OVP Range OCP Range	nperature				OVP	× OCP × OPP	-20°C · • OTP • Vin 0 - 110 0 - 110	~ 70°C OV \ Vin Unt)% F.S.)% F.S.	palance √ LD	IC OV					
Remote sense Operating Tem Storage Tempe Protections OVP Range	nperature erature	132 x 442	2 x 731.5 mm	/ 5.2 x 17.4 x		、OCP 、OPP	-20°C • OTP • Vin 0 - 110	~ 70°C OV \ Vin Unl)% F.S.)% F.S.)% F.S.		DC OV	27.2 inch				

*1 When output current is ≥ 2% of rated current. *2 The load variation is 0-100% at rated input voltage. *3 The time required for the output voltage to change from 10% to 90% or 90% to 10% at full scale.
*4 Under nominal AC input, recovers to ±1% of full-scale output voltage for a 50% to 100% or 100% to 50% load change. *5 When voltage output is at the max. voltage
*6 weight tolerance is within ±10% * The above is the specification when the output voltage and current are 1% or more
*The company's products are constantly being developed and improved, and the specifications are subject to change without prior notice.