

G6000/G6100 Series

Regenerative Programmable AC Power Source



Product Introduction

G6000/G6100 series regenerative programmable AC power sources are programmable four-quadrant grid simulators for grid-connected PV inverters, power conversion system, bi-directional chargers, wind power converters, PV plants and other grid-connected products. High power density design with output power up to 18kVA in 3U size and voltage up to 450V(L-N), expandable up to 180kVA by master-slave parallel. Also available with $\pm 700\text{Vdc}$ DC output and the maximum current in DC mode is identical to the AC RMS value. With energy recovery function, energy can be recycled back to the grid. Dual human-machine interface design, supporting both colour touch screen and button knob operation.



AC/DC 4-quadrant Output



Regenerative Electronic Load



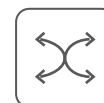
Transient Edit Function



Multiple Programming Modes



Waveform Programming Function



Comprehensive Protection

Product Advantages

Power output range: 0-18kVA(up to 180kVA).

Voltage range: 0 to 450V (L-N), 0 to 650Vdc.

Current range: 3-phase (0 to 35A), single-phase (0 to 105A), DC (0 to 105A).

Supports single-phase, three-phase and split-phase output modes.

Supports AC, DC, AC+DC output modes.

Harmonics expandable up to 100 times @50Hz/60Hz.

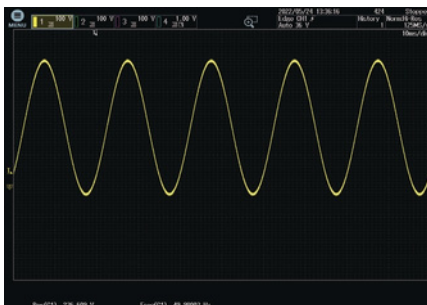
Output fundamental frequency up to 5000Hz.

Up to 10 units in parallel operation.

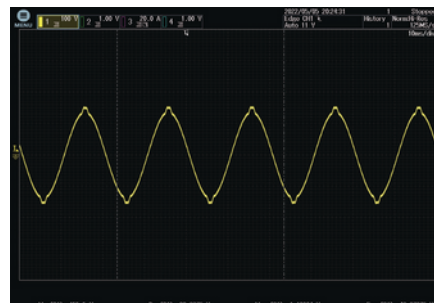
Specifications

Model	G6000-18K-0450-0090-G	G6100-18K-0450-0090-G
Output Phase	Three-phase, single-phase, three-phase independent AC, DC, AC+DC, DC+AC	
Output Mode	AC Output	
Output Voltage	L-N/0~450V,L-L/0~779VL-N/0~450V,L-L/0 ~779V	
Rated Value Output Current	30A@three-phase 30A@three-phase 90A@single-phase 90A@single-phase	
Output Power	18kVA 18kVA	
Resolution	0.01V 0.01V	
Accuracy	≤0.025%F.S. ≤0.05%+0.05%F.S.	
Load Regulation	≤0.025%F.S. ≤0.05%F.S.	
Line Regulation	≤0.01%F.S.@10% ≤0.01%F.S.@10%	
Voltage Distortion	<0.3%@50Hz/60Hz <0.5%@50Hz/60Hz <1%@15Hz~400Hz <1%@15Hz~200Hz	
Resolution	<2%@400Hz~4000Hz - <3%@4000Hz~5000Hz -	
Accuracy Current Peak	0.01A 0.01A	
Set Range	75A@three-phase 75A @three-phase 225A@single-phase 225A @single-phase	
Frequency Resolution	15Hz~ 5000Hz 15Hz ~ 200Hz	
Accuracy Set Range	0.01 0.01	
Phase Resolution	0.01% 0.01%	
Accuracy Harmonics	0~ 359.9° 0~359.9°	
Harmonic Order	±0.1° ±0.1°	
Content	±0.1° ±0.1°	
	Editable any voltage harmonic from 2 to 100th Editable any voltage harmonic from 2 to 100th	
	40% 40%	
	DC Output	
Output Voltage	650V 650V	
Rated Values Output Current	105A 90A	
Output Power	18kW 18kW	
Resolution	0.01V 0.01V	
Accuracy	≤0.1%F.S. ≤0.1%F.S.	
Voltage Load Regulation	≤0.025%F.S. ≤0.025%F.S.	
Line Regulation	≤0.01%F.S.@10% ≤0.01%F.S.@10%	
	AC Input	
Input Voltage Rated Values	342V~ 528V	
Input Frequency	47 ~63Hz	
Phase	3-Phase 4-Wire	
Max. Input Current	35A	
Power Factor	0.99	
	Common Parameters	
Efficiency	>0.88	
Dimensions	699 mm(D)×445mm(W)×133mm(H)	
Weight	40kg	
Communication Interface	LAN, USB, CAN, RS232, Digital IO, GPIB (optional)	

Test Waveforms



AC+DC output mode (150Vac_rms+200Vdc)



Built-in more than 30 typical harmonic voltage waveforms