

Off-grid Inverter

GF1-1KZ12S1/3KZ24S1/1K12S1/3K24S1

Designed for apartment or house, LIVOLTEK Backup Inverter using solid materials is more durable and last longer, which will save your time and money. The inverter equipped with a transformer for outstanding shock resistance ability. The inverter features a built-in MPPT solar charge controller, easy installation, and an LCD for users to understand its working status.

Features

- Compact, reliable, and cost-effective features
- 3 operating modes: AC first/Solar first / Energy-saving
- Adjustable AC charging current range of 0-30A for flexible battery configurations
- RS485 communication port and optional APP support
- PV Input Current 60Amax; Grid+PV Input Current 80A
- Compatible with charging from diesel or petrol generators in challenging electricity environments



Specifications

Model	GF1-1KZ12S1	GF1-3KZ24S1	GF1-1K12S1	GF1-3K24S1
Capacity				
Rated Power	1000VA /1000W	3000VA /3000W	1000VA /1000W	3000VA /3000W
Peak Power(20ms)	3000VA	9000VA	3000VA	9000VA
PV Input Data				
Solar Charger Type	-	-	MPPT	
Max. PV Input Power	-	-	560W(40A)	1680W(60A)
Max. PV Input Voltage	-	-	150V	150V
MPPT Voltage Range	-	-	15V~120V	30V~120V
Solar Charging Current	-	-	40A	60A
AC Input Data				
Input Voltage Waveform	Sinusoidal			
Rated Input Voltage	230Vac			
Selectable Voltage Range	170~285V (Computers) / 90~285V (Appliances)			
Rated Input Frequency	50Hz/60Hz			
Frequency Range	45-55Hz /55-65 Hz			
Max. Input Current	4.5A	13.0 A	4.5A	13.0 A
AC Output Data				
Output Waveform	Pure Sine Wave			
Start Motor	1HP	3HP	1HP	3HP
Rated Voltage	220/230/240V±10%			
Surge Power	100%~110%(Alarm), 110% ~ 120%(30sec), > 120%(2sec)			
Max. Efficiency(Battery Mode)	85%			
Rated Frequency	50Hz/60Hz			
Typical Transfer Time	< 4ms			
Power Factor	1			
THDv, Rated Power[%]	<3%			
No Load Loss(Battery Mode)	≤0.8% rated power			
No Load Loss(AC Mode)	≤2% rated power(charger does not work in AC mode)			
No Load Loss (Energy Saving Mode)	≤10W			
Battery & Charger				
Battery Type	Lead-acid			
Rated Battery Voltage	12V	24V	12V	24V
	Charge Voltage :14.2V; Float Voltage:13.8V(Single battery voltage)			
Charging Algorithm	3-Step(Constant Current, Constant Voltage, Floating Charge)			
Max. Charging Current	15A	20A	55A(PV+AC)	80A(PV+AC)
Protection				
System Protection	Battery undervoltage alarm/protection,Battery overvoltage alarm/protection,Battery overvoltage recovery voltage/Overload power protection,Inverter output short circuit protection/Temperature protection			
Working Mode				
Working Mode	Battery First/AC First/Saving Energy Mode			
General Data				
Dimension (W*H*D)	500*300*140 mm			
Weight	12kg		24kg	
Protection Degree	IP21			
Cooling	Fan			
Operating Temperature Range	- 10 C ~ 55 C			
Display	LCD			
Communication	NTC/ RS485/Wi-Fi			