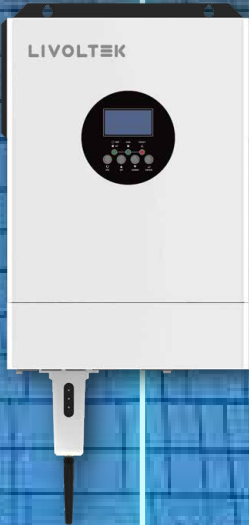# LIVOLTEK

OFF-GRID INVERTER

GF1-3K624S3/6K248S3/6K248P2/6K248G2

The LIVOLTEK off-grid hybrid inveter is an important part of the off-grid solar power system. With online and offline monitoring and management platform forevery inverter, this smart solar inverter can offer continuous power to your home. It can also run directy, with or without batteries, sharing eneray from utility and solar to loads alternatively. Integrate multiple protections and fault monitoring to ensure the safety of batteries and equipment.

Product Benefits

- Maximum efficiency up to 96%

- Dual output ports for flexible battery management and longer backup time

- Support multiple output priority: UTL, SOL, SBU, SUB

- Safe, compact, reliable, and cost-effective

- Parallel operation with up to 12 units, support 1 & 3 phase

- Built-in ECO Mode to prolong the battery backup time

- Max. input voltage: 500V, MPPT range: 60 - 450V

Model	GF1-3K624S3	GF1-6K248S3	GF1-6K248P2	GF1-6K248G2
Capacity	3.6KVA/3.6kW	6.2KVA/6.2kW		
Parallel Capability	No		YES	No
PV Input				
Max. PV Input Power	4000W	6500W		
Activating battery by PV	Yes			
Max. PV Array Open Circuit Voltage	500 VDC			
PV Array MPPT Voltage Range	60 - 500 VDC			
Start-up Voltage	120 VDC			
Max. Solar Input Current	15A	27A		
No. of MPPTs/Strings per MPPT	1 / 1			
AC Input				
Input Voltage Waveform	Sinusoidal			
Nominal Voltage	230VAC			
Acceptable Voltage Range	170VAC - 280VAC (for personal computer); 90VAC - 280VAC (for home appliances)			
Frequency	50Hz / 60 Hz (Auto sensing)			
AC Output				
Dual-Port Output	Yes	Yes	No	Yes
On Grid and Off Grid	Yes	Yes	No	Yes
Nominal Voltage	220 / 230 VAC ± 5%			
Surge Power	200%			
Frequency	50Hz / 60Hz			
Waveform	Pure Sine Wave			
Transfer Time	10ms (for personal computer); 20ms (for home appliances)			
Peak Efficiency(PV to INV)	96.0%			
Peak Efficiency(BAT to INV)	93.0%			
Overload Protection	5s@>=140% load, 10s@110% - 140% load			
Crest Factor	3 : 1			
Admissible Power Factor	0.6 - 1 (inductive or capacitive)			
Battery & Charger				
Battery Type	Lead-acid & Lithim Battery			
Battery Voltage	24VDC	48VDC		
Floating Charge Voltage	27VDC	54VDC		
OverCharge Protection	33VDC	63VDC		
Charging Method	CC / CV			
Lithium Battery Activation	Yes			
Lithium Battery Communication	Yes (RS485)			
Solar Charger Type	MPPT			
Max. Solar Charge Current	100A	120A		
Max. AC Charge Current	80A	80A		
Max. Charge Current(PV+AC)	100A	120A		
General Data				
Dimensions(W*H*D mm)	295*358*100	312*438*122	300*450*130	
Package Dimensions(W*H*Dmm)	380*465*175	390*560*210	390*540*210	
Net Weight	8.2kg	11kg	12kg	
Protection Degree	IP21			
Cooling	Fan			
Display	LCD + APP			
Operating Temperature Range	-10°C - 50°C			
Storage Temperature	-15°C - 50°C			
Humidity	5% - 95% Relative Humidity (Non-condensing)			