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# POWER YOUR LIFE **Anytime, Anywhere**

▶ www.livoltek.com



# **Energy Storage System**



# **Company Profile**

LIVOLTEK is one of the leading inverter manufacturers and service providers worldwide.

The company specializes in the residential and small sized commercial market, Its comprehensive product portfolio covers from on grid, energy storage, off grid and battery backup, as a member company of Hexing, a pioneer in smart grid, with global supply chain cutting edge technology and service network, LIVOLTEK is your trustworthy partner to deliver professional, responsive services and create sustainable customer value.



### **Hexing Group**

Listed on Shanghai Stock Exchange (603556), Hexing is a multi-national company founded in 1992 offering a state-of-the-art range of equipment and solutions to global utilities.

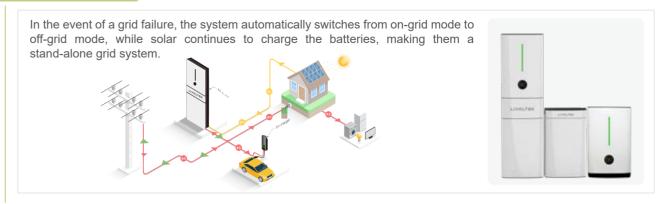
Today more than 90 countries around the globe are utilizing Hexing products and solutions for a better tomorrow.

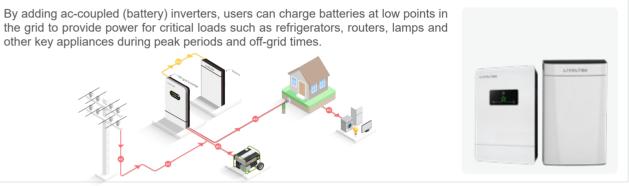


### Distributed Smart Grid Energy E Smart Water Sustainable Metering Safe-water

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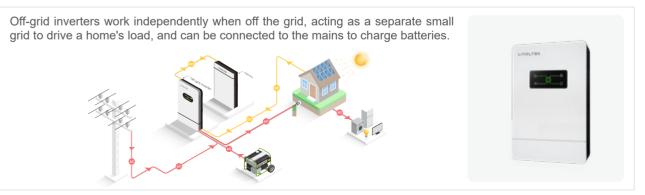
# **Product Application**













## LivoPower Hybrid Inverter

### Intelligent Energy Management

Built-in energy management prioritizes consumption of PV electricity (e.g. to charge the EV) when the sunshine is sufficient.



#### Peak Load Shaving



#### **Backup Power Supply**

#### **Hybrid System**

Combining hybrid inverter and low-voltage batteries, the Hyper Series flexibly store excess solar energy during sunny hours, which maximizes self-consumption of solar energy.

With back-up power, Hyper series serves essential loads or the entire house automatically and seamlessly when outage occurs.

### Features

- High efficiency, with improved MPPT function
- Intelligent charging & discharging function prevents battery from exhaustion of low SOC
- Auto-parallel connection for multistring battery system
- UPS function, with excellent load capability

- Plug and play
- Online real time monitoring of system's operation conditions
- Remote access to the software of inverter and batteries for setting, updating and debugging

#### **Specifications**

Model	Hyper-3000	Hyper-3680	Hyper-5000	
AC Output @ Grid				
AC Input Voltage/Frequency		186~264Vac/50 or 60Hz		
Nominal AC Power	3000W	3680W	5000W	
Nominal AC Current	13.0A	16.0A	21.7A	
THD of AC Current		<3%		
AC Output @ Off Grid				
AC Output Voltage/Frequency		220Vac/50 or 60Hz, Single Phas	е	
Continuous Output Power (@25C)	3kVA	3.68kVA	5kVA	
AC Output Current	13.0A	16.0A	21.7A	
Peak Power	1.1	, x Pnom, 10 Sec; 1.5 x Pnom,10	0ms	
Power Factor		0.8 Inductive to 0.8 Capacitive		
Waveform		Pure Sinusoidal Wave		
THD of AC Voltage		<3% with Resistive Load		
Solar Input				
Max. PV Voltage		550V		
MPPT Voltage Range		125-500V		
Max. PV Current	12A	10/10A	10/10A	
Max. Short Circuit Current	15A	14/14A	14/14A	
Strings Per MPP Tracker	1	1	1	
No. of MPP Trackers	1	2	2	
Battery Input		1		
Battery Type		Lithium Battery		
Battery Voltage		40~60V		
Galvanic Isolation for Battery		Yes		
Max Charge Current	60A	60A	100A	
BMS Communication		CAN/RS485		
Protection	Over Voltage, Under	Voltage, Over Current, Short Circ	cuit, Over Temperature	
Efficiency				
MPPT Efficiency		99.90%		
Euro Efficiency		96.50%		
Max. Efficiency		97.80%		
Battery Charge/Discharge Efficiency		95%		
General Data				
Dimensions (W*H*D)	415*560*145mm	415*67	′5*145mm	
Weight	28KG	33KG	35KG	
Mounting Information		Wall-mounted	50.10	
Operating Temperature		-20 °C~60 °C (Up 45 °C Derating)		
Relative Humidity		95%, No Condensation		
Operation Altitude		<2000m		
Ingress Protection		IP65		
Cooling Concept	Natural Cooling			

Note: Further modifications may not be notified.



## **EverPower LV Battery System**

#### Safe to Use

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#### LV Battery System

The BLF51 series is ideal for new installation of home energy storage and retrofit of existing PV system.

With high energy density, BLF51 is space-saving for indoor or outdoor installation. To serve evolving load requirement, flexible expansion can fit your energy demand of today and tomorrow.

### System Diagram—Residential



#### **Specifications**

Specifications				
Battery Model	BLF51-5			
Electrical Data				
Cell Туре	LFP			
Total Energy	5kWh			
Max. Depth of Discharge	90%			
Recommended Depth of Discharge	80%			
Nominal Voltage	51.2V			
Operating Voltage Range	40-58.4V			
Nominal Capacity	100Ah			
Max. Charge Current	50A			
Max. Discharge Current	100A			
Max. Parallel Number	5 Units			
General Data				
Mounting Information	Wall-mounted; Ground-mounted			
Communication	CAN/RS485			
Operating Temperature	0~45 ℃ Charge/-10~50 ℃ Discharge			
Dimension (W*H*D)	415*665*165mm			
Weight	45KG			
Ingress Protection	IP21/IP65			

Remarks: Specifications are subject to change without advance notice.



# Livoltek All-in-one Energy Storage System

Compact design saves your space, while slim appearance fits your home's aesthetics.

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### Energy Storage System

LIVOLTEK hybrid inverter is committed to providing you with a green and intelligent one-stop energy storage solution, which realizes the independent management of photovoltaic power generation, lithium battery storage, smart electricity use, reliable grid connection etc. The compact design saves your use space, while slim appearance fits your home's aesthetics. IP65 protection level and plug and play installation method are suitable for indoor and outdoor installation requirements in various scenes. The scalability of the battery modular system can be expanded to exactly you're your energy storage demand of future.

#### **Specifications**

Inverter Model	Hyper-3000(A)	Hyper-3680(A)	Hyper-5000(A)			
C Output @ Grid						
AC Input Voltage/Frequency		186 ~ 264Vac/50 or 60Hz				
Nominal AC Power	3000W	3000W 3680W				
Nominal AC Current	13.0A	16.0A	21.7A			
THD of AC Current		<3%				
AC Output @ Off Grid						
AC Output Voltage/Frequency		220Vac/50 or 60Hz, Single Phase				
Continuous Output Power (@25C)	3kVA	3.68kVA	5kVA			
AC Output Current	13.0A	16.0A	21.7A			
Peak Power	1.1	x Pnom, 10 Sec; 1.5 x Pnom,100ms	3			
Power Factor		0.8 Inductive to 0.8 Capacitive				
Waveform		Pure Sinusoidal Wave				
THD of AC Voltage		<3% with Resistive Load				
Solar Input						
Max. PV Voltage		550V				
MPPT Voltage Range		125-500V				
Max. PV Current	12A	12/12A	12/12A			
Max. Short Circuit Current	15A	14/14A	14/14A			
Strings Per MPP Tracker	1	1	1			
No. of MPP Trackers	1	2	2			
Battery Input		1				
Battery Type		Lithium Battery				
Battery Voltage		40~60V				
Galvanic Isolation for Battery		Yes				
Max Charge Current	60A	60A	100A			
BMS Communication		CAN/RS485				
Protection	Over Voltage, Under	Voltage, Over Current, Short Circuit,	Over Temperature			
Efficiency						
Euro Efficiency		96.50%				
Max. Efficiency		97.80%				
Battery Model		BLF51-5				
Cell Type		LFP				
Total Energy		5kWh				
Max. Depth of Discharge		90%				
Recommended Depth of Discharge	80%					
Nominal Voltage		51.2V				
Operating Voltage Range		40-58.4V				
Nominal Capacity		100Ah				
Max. Charge Current		50A				
Max. Discharge Current		100A				
Max. Parallel Number		5 Units				

Note: Further modifications may not be notified.

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## **LivoPower AC Coupled Inverter**

#### Cost Effective

#### Intelligence and Flexibility

#### Easy Services

#### AC Coupled Inverters with Battery Backup

By adding ac-coupled (battery) inverters, users can charge batteries at low points in the grid to provide power for critical loads such as refrigerators, routers, lamps and other key appliances during peak periods and off-grid times.

#### Features

- Natural convection, IP65
- Integrated with existing PV inverters
- Emergency power supply
- Multiple protection functions
- Self-use/Back-Up/Off-Grid/VPP

- Compact "all-in-one" system
- Intelligent storage management
- "Plug & Play" installation
- Local and remote monitoring
- Compatible with diesel generator

#### **Specifications**

Model	Retro-3680	Retro-5000	
AC Input Voltage/Frequency	186~264Vac/50 or 60Hz	186~264Vac/50 or 60Hz	
Nominal AC Power	3680W	5000W	
Nominal AC Current	16.0A	21.7A	
THD of AC Current	<3%	<3%	
Emergency Power Supply (EPS)			
AC Output Voltage/Frequency	220Vac/50 or 60	Hz, Single Phase	
Nominal AC Output Power	3.68KVA	5KVA	
Nominal AC Output Current	16A	21.7A	
Peak Power	1.1 x Pnom, 10 Sec	; 1.5 x Pnom, 1 Sec	
Power Factor	0.8 Inductive to	0.8 Capacitive	
Waveform	Pure Sinus	soidal Wave	
THD of AC Voltage	<3% with R	esistive Load	
Battery Input			
Battery Type	Lithi	um-ion	
Nominal Battery Voltage	48V	48V	
Battery Voltage Range	40- 60V	40-60V	
Galvanic Isolation for Battery	Yes	Yes	
Max. Charge Current	60A	100A	
Max. Discharge Current	60A	100A	
Communication	CAN/RS485	CAN/RS485	
Protection	Over Voltage, Less Voltage, Ove	Over Voltage, Less Voltage, Over Current, Short Circuit, Over Tem.	
Depth of Discharge	Lithium-ion: 0-90	% DOD Adjustable	
Efficiency			
Max. Charging Efficiency	95.6%	95.6%	
Max. Discharging Efficiency	95%	95%	
Гороlоду	High Frequency Is	olated Transformer	
General Data			
Dimension (W*H*D)	415*675*145mm	415*675*145mm	
Weight	33KG	35KG	
ngress Protection	IP65	IP65	
Mounting Information	Wall-mounted	Wall-mounted	
Operation Temperature	-20 °C ~60 °C (45 °C Derating)	-20 °C ~60 °C (45 °C Derating)	
Relative Humidity	095%, No Condensation	095%, No Condensation	
Operation Altitude	<2000m	<2000m	
Cooling Concept	Natural Convection (No Fan)	Natural Convection (No Fan)	



# Single-phase AC Charging Station (IEC Standard)

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# Durable Material

#### **Product Introduction**

LIVOLTEK 7.3kW single-phase AC charger is a high-end smart charging product available for wall and pole installation. It is small in size, exquisite in appearance, and easy to install. Thanks to its complete self-service operation, Users can finish the charging procedure independently.

#### **Features**

- Support RS485/CAN multiple communication interfaces, and communicate with inverters and electric meters to realize optimal energy storage and charging
- Remote and local upgrade
- Smart energy management

### **Specifications**

Model	A0070230E11	A0030230E11	A0070230E12	A0030230E12
Charging Interface Type	Type 2/3.5m Stand	dard Configuration	Type 1/3.5m Stand	dard Configuration
Input/Output				
Rated Voltage	230	Vac	230Vac	
Voltage Range	$85$ Vac $\sim$	265Vac	$85$ Vac $\sim$ 265Vac	
Rated Frequency	50Hz/	/60Hz	50Hz/60Hz	
Current Range	0~32A	0~16A	0~32A 0~	
Power	7.3kW	3.6kW	7.3kW	3.6kW
Inlet Wiring Specifications	3*6r	nm²	3*6n	nm²
Grid Architecture	TN	-S	TN	-S
General Characteristics				
Effciency	≥99.	.9%	≥99.	9%
Starting Mode	APP (Optional)/F	Plug and Charge	APP (Optional)/F	Plug and Charge
Noise	≤65		≤65	
Operating Temperature	<b>-30</b> °C ~	~ <b>50</b> °C	<b>-30</b> °C ~	~ <b>50</b> °C
Storage Temperature	-40°C ~	~ <b>70</b> °C	<b>-40</b> °C ~	~ <b>70</b> °C
Operating Humidity	5%~95%, No Condensation		5%~95%, No Condensation	
Altitude	≤200		≤2000m	
Protection Level	IP54		IP54	
Dimension (W*H*D)	170*400*110mm		170*400	*110mm
Weight	≤5KG		≤5ł	٢G
Installation	Wall and Pole (Optional) Mounted		Wall and Pole (O	ptional) Mounted
Energy Management	Support		Sup	port
Standby Power Consumption	<10	)W	<10	)W
HMI (Human Machine Interface)				
Status Indication	3-color	LED	3-color	LED
Firmware Upgrade	Local/R	emote	Local/Remote	
Communication Interfaces	Bluetooth/(WiFi/4G/	Ethernet Optional)	Bluetooth/(WiFi/4G/Ethernet Optional)	
Emergency Stop	Supp	port	Support	
Automatic Saving of Records in a Power Outage	Supp		Support	
Metering Function	Optic	onal	Optional	
Communication Expansion Interface	RS485	5/CAN	RS485/CAN	
Protection				
Leakage Current Protection	30mA Type A RCD External/ 6m A DC Componet Built-in		30mA Type A RCD External/ 6m A DC Componet Built-in	
It has multiple protection functions suc protection, lightning protection, short-c				
Standard				
EMC	IEC 61851-	21-2: 2018	IEC 61851-	21-2: 2018
Safety		1-1: 2017	IEC 6185	

Model	A0070230E11	A0030230E11	A0070230E12	A0030230E12
Charging Interface Type	Type 2/3.5m Standard Configuration		Type 1/3.5m Standard Configuration	
Input/Output				
Rated Voltage	230Vac		230Vac	
Voltage Range	85Vac~	265Vac	85Vac~	265Vac
Rated Frequency	50Hz	/60Hz	50Hz/	/60Hz
Current Range	0~32A	0~16A	0~32A	0~16A
Power	7.3kW	3.6kW	7.3kW	3.6kW
Inlet Wiring Specifications	3*61	nm²	3*6r	nm²
Grid Architecture	TN	I-S	TN	I-S
General Characteristics				
Effciency	≥99	.9%	≥99	.9%
Starting Mode	APP (Optional)/	Plug and Charge	APP (Optional)/F	Plug and Charge
Noise	≤65	ōdB	≤65	ōdB
Operating Temperature	<b>-30</b> °C	~ <b>50</b> °C	<b>-30</b> °C ~	~ <b>50</b> °C
Storage Temperature	<b>-40</b> °C	~ <b>70</b> °C	-40 °C ~	~ <b>70</b> °C
Operating Humidity	5% $\sim$ 95%, No	Condensation	5%~95%, No Condensation	
Altitude	≤2000m		≤2000m	
Protection Level	IP54		IP54	
Dimension (W*H*D)	170*400	*110mm	170*400*110mm	
Weight	≤5	KG	≤5KG	
Installation	Wall and Pole (Optional) Mounted		Wall and Pole (O	ptional) Mounted
Energy Management	Sup	port	Sup	port
Standby Power Consumption	<10W		<1(	W
HMI (Human Machine Interface)				
Status Indication	3-colo	LED	3-color	r LED
Firmware Upgrade	Local/R	emote	Local/Remote	
Communication Interfaces	Bluetooth/(WiFi/4G/	Ethernet Optional)	Bluetooth/(WiFi/4G/Ethernet Optional)	
Emergency Stop	Supp	port	Support	
Automatic Saving of Records in a Power Outage	Supp	port	Support	
Metering Function	Optic	onal	Optional	
Communication Expansion Interface	RS48	5/CAN	RS485/CAN	
Protection				
Leakage Current Protection	30mA Type A RCD External/ 6m A DC Componet Built-in		30mA Type A RCD External/ 6m A DC Componet Built-in	
It has multiple protection functions such protection, lightning protection, short-ci				
Standard				
EMC	IEC 61851-	21-2: 2018	IEC 61851-	-21-2: 2018
Safety	IEC 6185	1-1: 2017	IEC 6185	1-1: 2017



## LivoPower On-grid PV Inverter

#### uperior Efficiency



### Maximum efficiency String current 13A

• 150% PV oversizing ratio, 110% output overload



# High Reliability Natural cooling

- IP65, C5 auti-corrosion
- · LCD-free design improves reliability



### Intelligent Maintenance

ght weight and small size makes it easy to install PP for local settings & display emote configuration and upgrade



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LIVOLTEK

### **Product Overview**

### GT1-3K-SS

- Single phase & single MPPT
- Application: Residential use

### GT1-5/6K-DS

- Single phase & dual MPPT
- Application: Residential use

### Features

- IP65 class protection
- High efficiency
- Remote maintenance
- Die-cast aluminum case
- Plug & play

### Specifications

Model	GT1-3K-SS	GT1-5K-DS	GT1-6K-DS			
Input (PV)						
Rated Input Voltage		360V				
Max. Input Voltage	500V	550V	550V			
Max. Input Current	13A	26A (2*13A)	26A (2*13A)			
Max. Short Circuit Current	15A	30A (2*15A)	30A (2*15A)			
Start Input Voltage/Min. Operating Voltage	70V/50V	90V/70V	90V/70V			
MPPT Operating Voltage Range	50V-490V	70V-540V	70V-540V			
MPPT Operating Voltage Range (Full-Load)	240V-520V	240V-520V	300V-520V			
Max. Number of PV Strings	1	2 (1/1)	2 (1/1)			
No. of MPPTs	1	2	2			
Output (Grid)		· · ·				
Rated AC Active Power*	3000W	5000W	6000W			
Max. AC Apparent Power*	3300VA	5500VA	6600VA			
Max. AC Active Power** (PF=1)	3300W	5500W	6600W			
Max. AC Output Current	15A	25A	27.3A			
Rated AC Voltage		220V/230V, L+N+PE				
AC Voltage Range*		160V-300V (Adjustable)				
Rated Grid Frequency		50Hz/60Hz				
Grid Frequency Range**	4	5Hz-55Hz/55Hz-65Hz (Adjustable	)			
THDI	<3% (Rated Power)					
DC Current Injection	<0.5%ln					
Power Factor	>0.99 Rated	Power (Adjustable 0.8 Leading - 0	).8 Lagging)			
Efficiency		( )	00 07			
Max. Efficiency	97.8%					
European Efficiency	97.8%					
Protection		0170				
DC Switch		Support				
Anti-islanding Protection	Support					
AC Overcurrent Protection		Support				
AC Short Circuit Protection		Support				
DC Reverse Connection		Support				
Surge Arrester						
Insulation Detection	L	C Type III (Optional) / AC Type III				
Leakage Current Protection		Support				
General		Support				
Topology		Transformerless				
Ingress Protection		IP65				
-		<1W				
Night Self Consumption						
Cooling	Natural Cooling					
Operating Temperature Range		-25°C~60°C				
Relative Humidity Range	0-100%					
Max. Operating Altitude	4000m (>2000m Derating)					
Noise	00010/////	<30dB (Measured at 1m)				
Dimensions (W*H*D)	320*344*137mm	350*347*137mm	350*347*137mm			
Weight	6.5KG	8.5KG	8.5KG			
HMI & COM						
Display	Wireless & APP+LED					
		WiFi, Bluetooth				

Remarks: The range of output voltage and frequency may vary depending upon different grid codes.Specifications are subject to change without advance notice.



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## Intelligent Maintenance

### **Product Overview**

#### GT1-8/10K-D

- Single phase & Dual MPPT
- Application Use: Residential and small-sized industrial

### Features

IP65 class protection

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LIVOLTEK

- High efficiency
- Remote maintenance
- Die-cast aluminum case
- Plug & play

### **Specifications**

Model	GT1-8K-D	GT1-10K-D		
Input (PV)				
Max. PV Configuration	150%			
Max. Input Voltage	550V			
Rated Input Voltage	360V			
Max. Input Current	39A (2*13A+13A)			
Max. Short Circuit Current	45A (2*15A+1	5A)		
Start Input Voltage	90V			
MPPT Operating Voltage Range	70V-540V			
Max. Number of PV Strings	3 (2/1)			
No. of MPPTs	2			
Output (Grid)				
Rated AC Active Power	8000W	10000W		
Max. AC Apparent Power	8800VA	10000VA		
Max. AC Active Power (PF=1)	8800W	10000W		
Max. AC Output Current	40A	45.5A		
Rated AC Voltage	220V/230V, L+	N+PE		
AC Voltage Range①	160V-300V (Adju			
Rated Grid Frequency <sup>2</sup>	50Hz/60Hz			
Grid Frequency Range	45Hz-55Hz/55Hz-65Hz	(Adjustable)		
THDI	<3% (Rated Po			
DC Current Injection	<0.5%In			
Power Factor	>0.99 Rated Power (Adjustable 0.	8 Leading - 0.8Lagging)		
Efficiency				
Max. Efficiency	97.7%			
European Efficiency	97.3%			
Protection				
DC Switch	Support			
Anti-islanding Protection	Support			
AC Overcurrent Protection	Support			
AC Short Circuit Protection	Support			
DC Reverse Connection	Support			
Surge Arrester	DC Type III (Optional)	/ AC Type III		
Insulation Detection	Support	<i></i>		
Leakage Current Protection	Support			
General				
Topology	Transformerle	ess		
IP Rating	IP65			
Night Self Consumption	<1W			
Cooling	Natural Cooli	ng		
Operating Temperature Range	-25°C~60°C			
Relative Humidity Range	0-100%			
Max. Operating Altitude	4000m			
Noise (Typical)	30dB			
Dimensions (W*H*D)	450*400*170mm			
Weight	16KG			
HMI & COM				
Display	Wireless & APP	+LED		
Communication	Bluetooth/Wi			

**Remarks:** The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.

# LivoPower On-grid PV Inverter— Small Commercial



#### uperior Efficiency

- ltre wide veltege renge
- 130%~140% PV oversizing ratio 110% output overload



#### High Reliability

Integrated DC/AC SPD (type II) LCD-free design improves reliability

### Intelligent Maintenance

- Remote configuration and upgrade
- APP for local settings & display
- Dynamic limit of export to the utility grid
   String level I/V detection



#### **Product Overview**

#### GT3-17/20/22/25/28/30K-D

 Application:
 Small-sized industrial and commercial use

### Features

- IP65 class protection
- High efficiency
- Remote maintenance
- Die-cast aluminum case
- Plug & play

### Specifications

Model	GT3-17K-D	GT3-20K-D	GT3-22K-D	GT3-25K-D	GT3-28K-D	GT3-30K-I
Input (PV)						
Max. Input Voltage			100	)0V		
Rated Input Voltage		620V				
Max. Input Current		2*25A 2*37.5A				
Max. Short Circuit Current		60A (2*30A)			84A (2*42A)	
Start Input Voltage/Min. Operating Voltage			250V	/180V		
MPPT Operating Voltage Range			180V-	-960V		
MPPT Operating Voltage Range (Full-Load)			480V-	-800V		
Max. Number of PV Strings		4 (2/2)			6 (3/3)	
No. of MPPTs			2	2		
Output (Grid)						
Rated AC Active Power	17000W	20000W	22000W	25000W	28000W	30000W
Max. AC Apparent Power	18700VA	22000VA	24200VA	27500VA	30800VA	33000VA
Max. AC Active Power (PF=1)	18700W	22000W	24200W	27500W	30800W	33000W
Max. AC Output Current	3*28.3A	3*33.5A	3*35A	3*40A	3*45A	3*48A
Rated AC Voltage		1	380V/400V,	3W+N+PE	1	1
AC Voltage Range*			277V-520V			
Rated Grid Frequency			50Hz/			
Grid Frequency Range**		45Hz-55Hz/55Hz				
THDI	<3% (Rated Power)					
DC Current Injection	<0.5%In					
Power Factor		>0 99 Rated	Power (Adjustat		0.8 Lagging)	
Efficiency		0.000 1.0000		ie eie zeaang	0.0 20393)	
Max. Efficiency	98.2%	98.2%	98.2%	98.2%	98.2%	98.2%
European Efficiency	97.7%	97.7%	97.7%	97.7%	97.7%	97.7%
Protection	51.170	51.170	51.170	51.170	57.770	01.170
DC Switch			Sup	port		
Anti-islanding Protection				port		
AC Overcurrent Protection				port		
AC Short Circuit Protection				port		
DC Reverse Connection			Sup			
Surge Arrester			DC Type II			
Insulation Detection				port		
Leakage Current Protection				port		
General			Oup	port		
Topology			Transfor	merless		
Ingress Protection				65		
-						
Night Self Consumption Cooling		Natural Cooling	<1	W	Fan Cooling	
°			05 %	60°C		
Operating Temperature Range			-25°C			
Relative Humidity Range			0-10			
Max. Operating Altitude	4000m (>2000m Derating)					
Noise		<30dB		+070 5	<50dB	
Dimensions (W*H*D)	555*469.5*270.5mm					
Weight		37KG			40KG	
HMI & COM			14/2 1			
Display			Wireless &			
Communication			WiFi, Blueto	ooth, RS485		

**Remarks:** ■ The range of output voltage and frequency may vary depending upon different grid codes. ■ Specifications are subject to change without advance notice.



# LivoPower Off-grid Inverter

#### Multiple Operation Modes

Designed with strategies to schedule power charge and discharge according to PV's power out to maximize the use of solar. For unstable grid, it will charge the battery in priority and serve the load during

plackouts.

### **Compatible with Various Batteries**

Allows connection with mainstream battery types on the market such as lead acid, gel, and lithium.

Various operation strategies are designed to fit different batteries and operational conditions.

#### ntelligent Monitoring

Equipped with robust communication module, which transmits rich real-time information to the cloud platform for analysis and diagnosis.

#### Features

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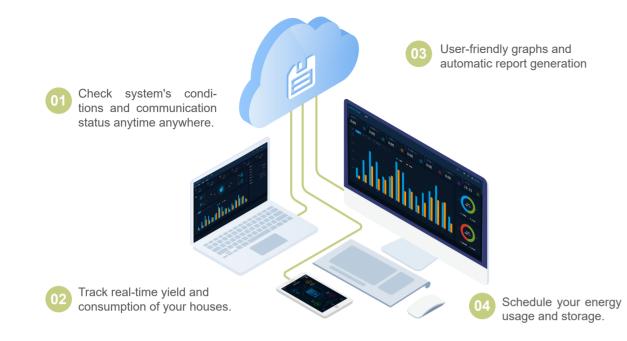
- Wide range of MPPT voltage, higher efficiency
- Compatible with various batteries
- Remote fault detection and diagnosis

- Split LCD can be installed separately from the inverter, making data review and inspection convenient.
- User-friendly cloud platform, and APP portal enables remote setting of parameters

### Specifications

Model	GF1-3K48S1	GF1-5K48S1		
Rated Power	3000VA/3000W	5000VA/5000W		
Input				
Voltage	230V			
Voltage Range	170-280V (For Personal Computers)/90-28	80V (For Home Applications)		
Frequency Range	50/60Hz (Auto Sen	sing)		
Max. Input Current	13A	21.7A		
Output				
AC Voltage Range (Bat. mode)	230Vac ±5%			
Peak Power	6000VA	10000VA		
Peak Efficiency	94%			
Transfer Time	10ms			
Waveform	Pure Sine Wav	e		
Battery				
Battery Type	Lead-acid/Lithiu	m		
Battery Voltage	48V			
Floating Charge Voltage	54 (Adjustable	)		
Over Voltage Protection	63 (Adjustable	)		
BMS Communication	CAN			
MPPT Charger				
Charge Type	МРРТ			
Max. PV Power	4000W	6000W		
MPPT Range	120-450			
Max. PV Voltage	480V			
Max PV Input Current	25A			
MPPT No.	1			
Max. PV Charge Current	60A	100A		
Max. AC Charge Current	60A	100A		
Max. Charge/Discharge Current	60A	100A		
General Data				
Humidity	5%-95% Relative Humidity (N	on-condensing)		
Operation Temperature	-10~50 °C			
Storage Temperature	-15~60 °C			
Ingress Protection	IP21			
Communication Interface	CAN (BMS)/USB/Dry Contact/Bluetooth/WiFi (Op	tional)/NTC/RS485/LCD (Optional)		
Dimension (W*H*D)	330*510*130m	m		
Weight	10KG			

# **Monitoring System**



### **Communication Module**

#### Wi-Fi Stick

- Waterproof design, resistant to bad weather
- Plug and play, no extra power supply is required
- Independent module, protecting internal parts of inverter
- External indicator lights, ensuring collection status at a glance

#### **Communication Box & Data Collector**

- Multiple communication interfaces including RS485/CAN/PLC/4G/ Digital / Analog, wide application scenario.
- Integrated microprocessor, optimized stability with RT clock circuit, enhanced accuracy.
- Three-way LED, Accurate indication of system working status, standard 12VDC Power supply, USB 2.0 Ports-Easy upgrade & maintenance.





Wi-Fi Stick for Hybrid System





SCS-04 for On-grid Inverter



