# LIVOLTEK

# Power Your Home With Green Energy





#### **About Livoltek**

LIVOLTEK is one of the leading solar product manufacturers and solution providers worldwide. As a member company of Hexing Group, which is established in 1992 and listed on the Shanghai Stock Exchange (603556), we have natural advantages in the smart grid and new energy industry of more than 90 countries, with cutting edge technology, global supply chain, and worldwide service network.

We are committed to providing high-quality solar power for global customers. Our comprehensive portfolio includes All-in-one Energy Storage System, grid-tied inverters, off-grid inverters, hybrid inverters, storage batteries, EV chargers, and monitoring systems (Web and APP) for remote management and expertise diagnosis.







#### **Global Network - Worldwide Service**

LIVOLTEK concentrates on green energy innovation. We are dedicated to giving our customers better quality, more effective, and more enjoyable energy use experiences.

With offices and warehouses all over the world, as well as the most experienced local technical team, LIVOLTEK is able to provide our global customers with high-quality solar goods and one-stop energy solutions, as well as faster local delivery and superior local support.



### Contents







### All-in-one Energy Storage System

Hyper-3000(A)/3680(A)/4600(A)/5000(A)/6000(A)

The LIVOLTEK All-in-one ESS combines a hybrid inverter and low-voltage batteries to help you reduce your electricity bills while maximize energy independence from the grid. It is packed with benefits such as greater energy harvest from PV modules, compact design saving your space, and its slim appearance fits your house aesthetics. In addition, plug&play and free online monitoring enable faster installations, quicker site mapping to the monitoring platform and easier maintenance with minimized efforts.

#### Features

- Flexible and easy to expand
- Natural cooling, extremely quiet
- 150% oversized, 150% yield
- Smart and easy operation
- Intelligent charging and active balance
- Fanless design, quiet and long lifespan



Elegant Modular and Unified Design



Flexible Storage Capacity up to 25 kWh



Export Control and Time-of-use Shifting



LIVOLTEK

Maximized Self-consumption

#### **Compatible Products**





Residential Lithium Battery

Smart EV Charger Wi-Fi Dongle





Smart Meter



Monitoring System

Inverter Model	Hyper-3000	Hyper-3680	Hyper-4600	Hyper-5000	Hyper-6000			
PV Input								
Max. PV Input Power	4500Wp	5520Wp	6900Wp	7500Wp	7500Wp			
Max. PV Input Voltage			600V	·	·			
MPPT Voltage Range			125~550V					
Max. PV Current	14A	14/14A	14/14A	14/14A	14/14A			
Max. Short Circuit Current	17.5A	17.5/17.5A	17.5/17.5A	17.5/17.5A	17.5/17.5A			
No. of MPPTs/Strings per MPPT	1/1	2/1	2/1	2/1	2/1			
AC Output @ Grid								
AC Input Voltage Range/Frequency		186	6~290Vac/50Hz or 60	OHz				
Nominal AC Power	3000W	3680W	4600W	5000W	6000W			
Nominal AC Current	13.0A	16.0A	20.0A	21.7A	26.1A			
THDi,Rated Power[%]			<3%	1				
EPS Output @ Off Grid								
EPS Output Voltage/Frequency		2	220Vac/50Hz or 60H	Z				
Continuous Output Power (@25C )	3kVA	3.68kVA	4.6kVA	5kVA	6kVA			
EPS Output Current	13.0A	16.0A	20.0A	21.7A	26.1A			
Peak Power		1.1 x Pno	om, 60 Sec; 1.5 x Pno	m, 100ms	1			
Power Factor		~1 (Adjustabl	le from 0.8 Leading to	o 0.8 Lagging)				
Waveform			Pure Sinusoidal Wav	e				
THDv,Rated Power[%]			<3%					
Battery Input								
Battery Type			Lithium Battery					
Battery Voltage			40~60V					
Galvanic Isolation for Battery			Yes					
Max.Charge Current of Inverter	60A	80A	100A	100A	125A			
Max.Discharge Current of Inverter	60A	80A	100A	100A	125A			
BMS Communication			CAN					
Protection	Over V	′oltage, Under Voltag	je, Over Current, Sho	rt Circuit, Over Temp	erature			
Efficiency								
Max. Efficiency	97.6%		97.89	%				
Euro Efficiency	97.1%		97.49	%				
Battery Model			BLF51-5					
Cell Type			LFP					
Nominal Energy			5kWh					
Max. Depth of Discharge			90%					
Nominal Voltage			51.2V					
Operating Voltage Range			40-58.4V					
Nominal Capacity			100Ah					
Max. Charge Current			50A					
Max. Discharge Current			100A					
Scalability		U	p to 5 Modules/25kV	Vh				
General Data								
Dimension (W*H*D)			415*1380*165mm					
Weight	85kg	86kg	87kg	87kg	87kg			
Standard Warranty		5 Year	rs					





# Hybrid Inverter

Single Phase: Hyper-3000/Hyper-3680/Hyper-4600/Hyper-5000/Hyper-6000

For new photovoltaic systems, the LIVOLTEK hybrid solution is a wise choice to improve your energy storage and utilization. Featuring a compact design, robust safety features, and superior performance, the LIVOLTEK hybrid bi-directional inverter can be perfectly adapted to residential and small businesses' self-consumption with battery storage. Its integrated backup power function and automatic activation in the event of power failure enable you to enjoy energy independence and maximize your solar investment through the export power control feature and time of use shifts for reducing electricity bills. Additionally, its modular scalable design offers the flexibility to start from small be size and expandable as your needs grow.

#### Features

- 24/7 local and remote monitoring
- High charging & discharging capacity
- Fanless design, quiet and long lifespan
- 150% oversized, 150% yield
- All-in-one & split application optional
- Power critical loads during power cuts







Export Control Function



150%Oversized, 150%Yield



Compatible with High-current PV Modules

#### **Compatible Products**





Residential Lithium Battery

Smart EV Charger







Smart Meter

Monitoring System

Model	Hyper-3000	Hyper-3680	Hyper-4600	Hyper-5000	Hyper-6000		
PV Input							
Max. PV Input Power	4500Wp	5520Wp	6900Wp	7500Wp	7500Wp		
Max. PV Input Voltage			600V				
Nominal Input Voltage		360V					
MPPT Voltage Range	125~550V						
No. of MPPTs/Strings per MPPT	1/1	2/1	2/1	2/1	2/1		
Max. PV Current	14A	14/14A	14/14A	14/14A	14/14A		
Max. Short Circuit Current	17.5A	17.5/17.5A	17.5/17.5A	17.5/17.5A	17.5/17.5A		
AC Output @ Grid							
Nominal AC Power	3000W	3680W	4600W	5000W	6000W		
Max. Apparent Output Power	3000VA	3680VA	4600VA	5000VA	6000VA		
Nominal AC Voltage			220V/230V/240V				
Nominal AC Voltage Range			186~290V				
AC Frequency			50Hz/60Hz				
Max. AC Current	14.0A	16.0A	20.0A	23.9A	26.1A		
THDi,Rated Power[%]			<3%				
Power Factor		~1 (Adjustab	le from 0.8 Leading to	0.8 Lagging)			
EPS Output @ Off Grid							
Nominal EPS Power	3000W	3680W	4600W	5000W	6000W		
EPS Peak Power	1.1 x Pnom, 60 sec; 1.5 x Pnom, 1 sec						
Nominal Output Voltage	220V/230V						
Nominal Frequency			50Hz/60Hz	1			
Nominal Output Current	13.0A	16.0A	20.0A	21.7A	26.1A		
THDv,Rated Power[%]			< 3%				
Battery Input							
Battery Type			Lithium				
Battery Voltage		1	40~60V				
Max. Charge/Discharge Current	60A	80A	100A	100A	125A		
Communication with BMS			CAN				
Efficiency		1					
Max. Efficiency	97.6%		97.	8%			
Euro Efficiency	97.1%		97.	4%			
General Data							
Dimension (W*H*D)		T	415*625*155mm		1		
Weight	29kg	30kg	30kg	30kg	30kg		
Mounting Method		\	Wall-mounting Brack	et			
Protection Rating			IP65				
Cooling			Natural Convection				
Operating Temperature Range		-25	C~+60°C (>45°C Dera	ating)			
Display			LED & APP				
Communication		V	Vi-Fi/DRM/CAN/RS48	35			
Standard Warranty			5 Years				

Remarks: The range of output Voltage and frequency may vary depending upon different grid codes.





## Hybrid Inverter

Three Phase: HP3-5K/6K/8K/10K/12K/15K/17K/20K /25K/30K D1

As the core of the energy storage solution, LIVOLTEK three phase hybrid inverter offers flexible and scalable solutions for both residential and commercial applications. With the ability of scalable battery storage, the high-voltage inverter facilitate powerful energy backup and also present high self-consumption with optimised built-in EMS to reduce energy cost.



#### Features

- 150% PV oversize
- 100% Unbalanced output
- Max. 20A DC input current per string
- Free online monitoring and maintenance
- UPS level switching time for critical loads
- Multi woking modes for optimal perfomance





Voltage Range 150V-800V



Support Unblance Load



Export Limitation



High Voltage Lithium Battery



Wi-Fi Dongle



Smart Meter



Monitoring System

Model	HP3-5KD1	HP3-6KD1	HP3-8KD1	HP3-10KD1	HP3-12KD1	HP3-15KD1	HP3-17KD1	HP3-20KD1	HP3-25KD1	HP3-30KD1
PV Input										
Max. PV Input Power	7500Wp	9000Wp	12000Wp	15000Wp	18000Wp	22500Wp	25500Wp	30000Wp	37500Wp	45000Wp
Max. PV Input Voltage		1000V								
Nominal Input Voltage					60	00V				
MPPT Voltage Range					150 V -	~ 850 V				
No. of MPPTs/Strings per MPPT	2/(1+1)	2/(1+1)	2/(1+1)	2/(1+1)	2/(1+1)	2/(1+2)	2/(2+2)	2/(2+2)	2/(2+2)	2/(2+2)
Max.PV Current	20/20A	20/20A	20/20A	20/20A	20/20A	20/32A	32/32A	32/32A	40/40A	40/40A
Max. Short Circuit Current	30/30A	30/30A	30/30A	30/30A	30/30A	30/48A	48/48A	48/48A	60/60A	60/60A
AC Output @ Grid										
Nominal AC Output Power	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	25000W	30000W
Max. AC Input Power	7500W	9000W	12000W	15000W	18000W	22500W	25500W	30000W	37500W	45000W
Nominal AC Voltage					3W+N+PE	, 230/400V				
AC Frequency					50 Hz	/ 60 Hz				
Max. Output Current	8.5A	10.5A	13.5A	17.0A	21.5A	27.0A	30.0A	32.0A	40.0A	48.0A
THDi,Rated Power[%]					< 2	3%				
Power Factor				~1 (Adjust	able from 0.8	B Leading to C	.8 Lagging)			
EPS Output @ Off Grid										
Nominal EPS Power	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	25000W	30000W
EPS Peak Power					1.1 x Pno	om, 60sec				
Nominal Output Voltage					3W+N+PE	, 230/400V				
Nominal Frequency					50 Hz	/60 Hz				
Nominal Output Current	7.3A	8.7A	11.6A	14.5A	17.4A	21.8A	24.8A	29.0A	36.3A	43.5A
THDv,Rated Power[%]					< 3	3%				
Battery Input										
Battery Type					Lith	nium				
Battery Voltage Range					150V ~	~ 800 V				
Max. Charge/Discharge Current			30A/30A				50A/50A		60A /	60A
Communication with BMS					CA	AN				
Efficiency										
Max. Efficiency	98.1%	98.1%	98.2%	98.2%	98.3%	98.3%	98.3%	98.3%	98.5%	98.5%
Euro Efficiency	97.5%	97.5%	97.5%	97.5%	97.6%	97.6%	97.8%	97.8%	98%	98.1%
General Data										
Dimension (W*H*D)					560*430	)*250 mm				
Weight	20kg	20kg	23kg	23kg	23kg	29kg	29kg	29kg	29kg	29kg
Mounting Method					Wall-n	nounted				
Protection Rating					IP	65				
Cooling	Natural (	Convection				Intellig	gent Fan			
Operating Temperature Range					-25 °C	~+60 °C				
Display					LED &	& APP				
Communication					Wi-Fi/DRM	/CAN/RS485				
Standard Warranty					5 Y	ears				

Remarks: The range of output Voltage and frequency may vary depending upon different grid codes.





### AC Coupled Inverter Retro-3000/3680/4600/5000/6000

The LIVOLTEK AC coupled inverter is a cost-efficient solution to upgrade any existing PV inverter system to the hybrid one by adding a backup battery. This battery-based inverter allows you to store the surplus power to maximize self-consumption and protects you from rising electricity costs to achieve both grid-tied benefits and off-grid independence. Along with its ability to address the large retrofit market of existing PV systems, it also makes innovative residential storage solutions available for homes without solar-powered, ensuring energy flexibility and continuous power supply. In addition, you also get the added benefits of easy-to-install, reliability and use-friendly function.



#### Features

- Quick and easy installation
- Intelligent storage management
- Integrated with existing PV inverters
- Extremely quiet
- Indoor or outdoor installation
- Smart energy monitor and control





Maximized Self-consumption



Easy and Economical Way to Retrofit



Flexible Schedule for Charging and Discharging

#### **Compatible Products**









Smart Meter



Grid Tied Inverter

Residential Lithium Battery

Wi-Fi Dongle

Monitoring System

Model	Retro-3000	Retro-3680	Retro-4600	Retro-5000	Retro-6000		
AC Output @ Grid							
Nominal AC Power	3000W	3680W	4600W	5000W	6000W		
Max. Apparent Output Power	3000VA	3680VA	4600VA	5000VA	6000VA		
Nominal AC Voltage		220V/230V/240V					
Nominal AC Voltage Range		186V~290V					
Output Frequency			50Hz/60Hz ±5Hz				
Max. AC Current	13.0A	16.0A	20.0A	21.7A	26.1A		
THDi,Rated Power		·	<3%				
Power Factor		~1 (Adjustab	le from 0.8 Leading to	0.8 Lagging)			
EPS Output @ Off Grid							
Nominal EPS Power	3000W	3680W	4600W	5000W	6000W		
EPS Peak Power		1.1 x Pr	nom, 60 sec; 1.5 x Pnon	n, 1 sec			
Nominal Output Voltage			220V/230V				
Nominal Frequency			50Hz/60Hz				
Nominal Output Current	13.0A	16.0A	20.0A	21.7A	26.1A		
Waveform			Pure Sinusoidal Wave				
THDv(@Liner Load)			< 3%				
Battery Data							
Battery Type			Lithium				
Nominal Battery Voltage			48V				
Battery Voltage Range			40V-60V				
BMS Communication			CAN				
Max.Charge/Discharge Current	60A	80A	100A	100A	125A		
Communication with BMS		Acco	ording to the BMS Direc	ctive			
Efficiency							
Max. Charging Efficiency			94.6%				
Max. Discharging Efficiency			94.6%				
General Data							
Demensions(W*H*D)			415*625*155mm				
Weight	28.5kg	29kg	29kg	29kg	30kg		
Mounting Method		١	Wall-mounting Bracket	-			
Protection Rating			IP65				
Cooling			Natural Convection				
Operating Temperature Range		-25	C~+60°C (>45°C Derat	ing)			
Max. Operating Altitude			2000m				
Noise			<25dB				
Relative Humidity		0~	100%,No Condensatio	on			
Display			LED & APP				
Topology			Transformerless				

Remarks: The range of output Voltage and frequency may vary depending upon different grid codes.





### High-Voltage Residential Battery

Lithium Battery System: BHF-S10/S15/S20/S25/S30

The LIVOLTEK BHF HV Battery System is ideal for new installation of residential energy storage system. With high energy density, high efficiency ,modular stacking design and IP65 rating, BHF series battery is space-saving for indoor and outdoor installation.Up to 30 kWh system can fit your high energy demand.



#### **Features**

- IP65 supporting indoor and outdoor installation
- Long cycle life and safest prismatic LFP batteries
- Remote fault diagnosis, upgrade and maintenance
- Reliable performance: high efficiency, high energy density and 90% DOD
- Modular stacking design, easy installation, supporting floor and wall mounting



#### **Compatible Products**



Hybrid Inverter



Monitoring System

Model	BHF-S10	BHF-S15	BHF-S20	BHF-S25	BHF-S30		
Nominal Voltage	204.8V	307.2V	409.6V	512V	614.4V		
Operating Voltage Range	172.8V-230.4V	259.2V-345.6V	259.2V-345.6V	432V-576V	518.4V-691.2V		
Battery Module		10	)2.4V 50Ah 5.12k\	Vh			
Number of Modules	2	6					
Total Energy	10.2kWh	15.4kWh	20.5kWh	25.6kWh	30.7kWh		
Usable Energy	9.2kWh	13.8kWh	18.4kWh	23.0kWh	27.6kWh		
Rated Capacity			50Ah				
Nominal Power	5.1kW	7.7kW	10.2kW	12.8kW	15.4kW		
Max. Power	9.8kW	14.7kW	19.7kW	24.6kW	29.5kW		
Recommend Charge/Discharge Current			25A				
Max. Charge/Discharge Current			48A				
Cycle Life	6000 Cycles <sup>[1]</sup>						
Expected Life Time/Warranty			10 Year				
Operating Temperature Range		Charge: 0 C	C~55°C/Discharge:	<b>-20</b> ℃~55℃			
Storage Temperature			<b>-20</b> ℃~55℃				
Operating Humidity			5%-95%				
Operating Altitude			Below 4000m				
Protection Degree			IP65				
Installation Location		Wall-m	nounted / Ground-n	nounted			
Battery to Inverter Communication			CAN				
Battery to Battery/BMS			CAN				
Certificate		CE,UN3	88.3,IEC62619,IE	C61000			
Protective Level			Ι				
Dimensions(W×H×D mm)	870*878.5*208.7	870*1167*208.7	870*1455*208.7	870*1167*208.7 870*778*208.7	870*1167*208.7 870*1067*208.7		
Net Weight	147kg	209kg	271kg	356kg	418kg		

[1]: Test conditions: 0.5C Charge/0.5C Discharge, @25°C, 90% DOD, 70% EOL.





# Low-Voltage Residential Battery

Lithium Battery System: BLF51-5 51.2V100Ah

The BLF51-5 LV battery system is ideal for new installation of household energy storage. With high energy density and wall- mounted solution, BLF51-5 LV battery system is space-saving for indoor and outdoor installation. To serve increasing load requirement, the flexible expansion can fit your energy demand of today and tomorrow.



#### Features

- Intelligent BMS with multiple protections
- Double and robust mechanical protection
- IP65 supporting indoor and outdoor installation
- Long cycle life and safest prismatic LFP batteries
- Reliable performance: high efficiency and 90% DOD
- Easy and quick installation and expansion with modular design





Hybrid Inverter



AC Coupled Inverter





Off-grid Hybrid Inverter



Monitoring System

Model	BLF51-5
Battery Type	LFP
Nominal Voltage	51.2V
Operating Voltage Range	43.2V~57.6V
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Depth of Discharge	90%
Usable Energy	4.6kWh
Dimension(W*H*D)	IP21: 415*662*178mm; IP65: 415*685*178mm
Weight	55kg
Max. Charge/Discharge Current	50A/100A
Operating Temperature	Charge: 0°C~50°C; Discharge: -10°C~55°C
Operating Humidity	5%~95%
Storage Temperature	-20°C~60°C
Operating Altitude	Below 4000m
Communication	RS485/CAN
Scalability	Up to 5 Modules/25kWh
Cooling Type	Natural
Ingress Protection	IP21/IP65
Cycle Life	6000 Cycles <sup>[1]</sup>
Standard Warranty	5 Years/10 Years (Optional)
Authentication Level	IEC62619/CE/UN38.3

[1]: Test conditions: 0.5C Charge/0.5C Discharge, @25°C, 90% DOD, 70% EOL.





# Low-Voltage Residential Battery

IP21 Lithium Battery: BLF-B51100

The BLF-B51100 Lithium battery system is ideal for new installation of household energy storage. With high energy density and wall-mounted solution, BLF-B51100 battery system is space-saving for indoor installation. To serve increasing load requirement, the flexible expansion can fit your energy demand of today and tomorrow.



#### Features

- Intelligent BMS with multiple protections
- Double and robust mechanical protection
- IP21 supporting indoor installation

- Long cycle life and safest prismatic LFP batteries
- Reliable performance: high efficiency and 90% DOD
- Easy and quick installation and expansion with modular design





Long Cycle Life (4000/6000 Cycles)







Off-Grid Inverter



Monitoring System

Model	BLF-B51100
Battery Type	LFP
Nominal Voltage	51.2V
Operating Voltage Range	43.2V~57.6V
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Max.Power	Charge:4.1kw;Discharge:5.12kw
Depth of Discharge	90%
Usable Energy	4.6kWh
Dimension(W*H*D)	335*622*135.5 mm
Weight	42.6kg
Max. Charge/Discharge Current	100A/100A
Operating Temperature	Charge: 0°C~50°C; Discharge: -10°C~55°C
Operating Humidity	5%~95%
Storage Temperature	-20°C~60°C
Operating Attitude	Below 4000 m
Communication	RS485/CAN
Scalability	Up to 5 Modules/25kWh
Cooling Type	Natural
Ingress Protection	IP21
Installation Location	Wall-mounted
Cycle Life	4000 Cycles / 6000 Cycles <sup>[1]</sup> (Optional)
Standard Warranty	5 Years/10 Years (Optional)
Authentication Level	IEC61000/UN38.3

[1]: Test conditions: 0.5C Charge/0.5C Discharge, @25<sup>°</sup>C, 90% DOD, 70% EOL.





### Low-Voltage Residential Battery

Lead-acid Battery: BLA-12100/12200

BLA-12100/12200 Lead-Acid Battery is a reliable and cost-effective energy storage solution.

With its high-quality materials and advanced manufacturing process, BLA-12100/12200 offers high energy density, long cycle life, and excellent performance, and it also guarantees safety, efficiency, and environmental friendliness.



#### Features

- Excellent charge acceptance ability
- High energy density and power density
- Optimized capability of instant high-current discharging
  High corrosion resistant performance: Pb-Ca multi-alloy grid
- Long life
- Precision sealing technology
- Excellent deep cycle discharge capability
  Strong high and low temperature performance





Long Cycle Life







Off-Grid Inverter



Monitoring System

Model	BLA-12100	BLA-12200					
Nominal Voltage	12	2V					
Nominal Capacity	100Ah	200Ah					
Design Life	12years at 25	°C , floating life					
Terminal	M	8					
Approx. Weight	Approx28.0kg (61.8lbs)	Approx55.5kg (122.4lbs)					
Container Material	AE	3S					
	100 A h: HR (5.00A to 10.5V)	200.0Ah: HR (10.0A to 10.5V)					
Rated Capacity	75.0Ah: HR (25.0A to 10.5V)	147.0Ah: HR (49.0A to 10.5V)					
	62.5Ah: HR (62.5A to 9.6V)	122.0Ah: HR (122.7.0A to 9.6V)					
Internal resistance	Full Charged at 25°C: 5.5 m $\Omega$	Full Charged at 25°C: 3.2 m $\Omega$					
Max. Discharge Current	920A (5S)	1840A (5S)					
	Discharge: -20 ~	55°C (-4~ 131°F)					
Operating Temperature	Charge : -20 ~4	Charge : -20 ~40 °C (-4~ 104°F)					
	Storage: -15 ~5	Storage: -15 ~50 °C (-5~ 122°F)					
	Charge Current: Max. 20.0A; Recom.10.0A	Charge Current: Max. 40.0A; Recom.20.0A					
Charge Method	Float Charge: 13.38-13.62V	′, Recom.13.62V(-18mV/ °C)					
	Equalize Charge: 13.62-14.4	Equalize Charge: 13.62-14.4V, Recom.14.4V(-24mV/ °C)					
	Cycle Charge:14.4-15.0V,	Recom.14.7V(-30mV/ °C)					
Self Discharge	≤3 % /Mor	th at 25°C					
Standard Warranty	1 Y	ear					

#### Discharge Characteristics:



#### Discharge Time







Temperature Effects on Long Term Float Life :







## Industrial and Commercial ESS

BHF-G Series Battery System: BHF-G20/25/30/35/40/45/50/55/60

Livoltek BHF-G series are a high-performance, scalable high-voltage battery storage module, can be directly used as backup power or combined with photovoltaics to form an optical storage system, suitable for shops, hotels, small factories and other scenarios. As an energy storage system, the BHF-G series adopt the modular and rack-mounted design which are easy to install and maintain. A single battery pack has a capacity of 5.12kWh, while a cluster supports up to 12 packs as a combination system with a capacity of 61.4kWh. Also, multiple battery clusters can be in parallel for expanding capacity and power(up to 5 in parallel for a capacity of 300 kWh). Additionally, because of its Intelligent BMS system with high-performance equalization technology and multiple protections, the system can automatically balance the current and voltage of each cell and maintain it for long cycle life.



- Easy installation and expansion with modular design
- Long cycle life with LFP cells
- Intelligent BMS multiple protection
- Wide operating temperature range from -20°C to 55°CReal-time moniter and management via CAN/RS485
- 10 Years Warranty











Wide Temperature Tolerance(-20°C~55°C)



Hybrid Inverter



Monitoring System

Model	BHF-G20	BHF-G25	BHF-G30	BHF-G35	BHF-G40	BHF-G45	BHF-G50	BHF-G55	BHF-G60
Nominal Voltage (V)	204.8	256	307.2	358.4	409.6	460.8	512	563.2	614.4
Operating Voltage	172 8~230 /	216~288	259 2~345 6	302 4~403 2	345.6~460.8	388.8~518.4	132~576	175.2~633.6	518 /~691 2
Range (V)	172.0 230.4	210 200	200.2 040.0	502.4 405.2	545.0 400.0	500.0 *510.4	432 370	473.2 033.0	510.4 0051.2
Rate Capacity (Ah)		100							
Number of modules	4	5	6	7	8	9	10	11	12
Total Energy (kWh)	20.5	25.6	30.7	35.8	41	46.1	51.2	56.3	61.4
Usable Energy (kWh)	18.4	23	27.6	32.3	36.9	41.5	46.1	50.7	55.3
Rated Power (kW)	10.2	12.8	15.4	17.9	20.5	23	25.6	28.2	30.7
Max power (kW)	20.5	25.6	30.7	35.8	41	46.1	51.2	56.3	61.4
Rated Charge/			<u>.</u>	·	E0/E0				
Discharge Current (A)					50/50				
Max charge/					90/100				
Discharge Current (A)					00/100				
Depth of Discharge					90%				
Operating				C	Charge: 0~55°C	C			
Temperature (°C)				Disch	harge: -20°C~	55°C			
Operating Humidity					5%~95%				
Operating Altitude					<4000m				
Communication					CAN/RS485				
Cooling Type					Natural				
Protection Rating					IP20				
Cycle Life				40	00/6000 Cycle	€S <sup>[1]</sup>			
Warranty					5/10 Years				
Dimensions (mm)				Ę	545*480*200	0			

[1]: Test conditions: 0.5C Charge/0.5C Discharge, @25<sup>°</sup>C, 90% DOD, 70% EOL.





**Grid Tied Inverter** Single Phase: GT1-2K5/3K/3K3/3K6/4K/5K/6K D2

Product Release Soon

LIVOLTEK GT1 2.5~6K-D2 grid-tied inverters adopt modern design for residential requirements. Its compact size and dual MPPTs can be utilised in complex design environments. The maximum input current per string is up to 16A, making it compatible with large 182+ PV modules. Additionally, it features an integrated AFCI (Arc Fault Circuit Interrupter) for DC arc fault protection, providing a high level of safety. Our interactive Wi-Fi monitoring via our App or web platform allows for smart remote supervision and maintenance, making your solar energy pursuit effective and efficient.



#### Features

- DC input 16A per string
- Integrated AFCI(optional)
- Lower startup & Daul MPPT
- 150% oversizing and 110% overloading
- 7\*24 hours monitoring and maintenance
- Plug-and-play design for quick installation





**Export Limitation** 



Optional AFCI Module



7\*24 Remote Monitoring

#### **Compatible Products**



Wi-Fi Dongle



Smart Meter



Monitoring System

Preliminary

Model	GT1-2K5D2	GT1-3KD2	GT1-3K3D2	GT1-3K6D2	GT1-4KD2	GT1-5KD2C	GT1-5KD2	GT1-6KD2
PV Input								
Max. DC Input Power	3750Wp	4500Wp	4950Wp	5400Wp	6000Wp	7500Wp	7500Wp	9000Wp
Max. DC Input Voltage				60	0V	1		
Min PV Input Voltage				70	)V			
Start-up DC Input Voltage				90	)V			
Nominal DC Input Voltage				36	0V			
MPPT Voltage Range				70-5	550V			
Max. PV Current				16A-	+16A			
Max. Short Circuit Current				20A-	+20A			
No. of MPPTs/Strings per MPPT				2	/1			
AC Output								
Nominal AC Power	2500W	3000W	3300W	3600W	4000W	5000W	5000W	6000W
Max. Apparent Power	2750VA	3300W	3630VA	3690VA <sup>[1]</sup>	4400VA	5000VA	5500VA <sup>[3]</sup>	6600VA
Rated AC Grid Output Current	11.4A	13.6A	15A	16.3A	18.2A	22.7A	22.7A	27.3A
Max. AC Output Current	12.5A	15A	16.5A	18A <sup>[2]</sup>	20A	22.7A	25A <sup>[4]</sup>	30A
Rated AC Grid Voltage				220V/230V/2	40V, L+N+PE	Ξ		
AC Grid Voltage Range				154V-290V	(Adjustable)			
Rated Grid Frequency				50Hz	/60Hz			
Grid Frequency Range			45Hz	z-55Hz/55Hz-	65Hz (Adjus	table)		
Power Factor		> (	0.99 Rated Po	wer (Adjustal	ole 0.8 Leadir	ng - 0.8 Laggi	ing)	
THDi, Rated Power[%]				<3	3%			
Efficiency								
Max. Efficiency	97.70%	97.70%	97.70%	97.70%	97.70%	97.70%	97.70%	97.70%
Euro Efficiency	96.50%	96.50%	96.50%	96.50%	97.00%	97.00%	97.00%	97.00%
MPPT Efficiency				>9	9%			
Protection								
Surge Arrester				Тур	e II			
Over Current Protection				Sup	port			
AC Short Circuit Protection				Sup	port			
Over Voltage Protection				Sup	port			
Anti-islanding Protection				Sup	port			
Ground Fault Monitoring				Sup	port			
Residual Current Monitoring Unit				Sup	port			
DC Reverse Polarity Protection				Sup	port			
AC Auxiliary Power Supply (APS)				Opti	onal			
Anti-arc Protection				Opti	onal			
General Data								
Dimension (W*H*D)				368*325	*150mm			
Weight				12	kg			
Protection Degree				IP	65			
Cooling				Natural	Cooling			
Operating Temperature Range			-30	°C ~ +60°C (	Derating at 4	5°C)		
Display				LED-	APP			
Communication				RS485(Me	eter), Wi-Fi			
Topology				Transfor	rmerless			
Certifications and Standards								
Grid Regulation		"IEC61727, I	EC62116, OF	RDINANCE No	o. 140, OF MA	ARCH 21, 202	2, EN50549"	
Safety/EMC Standard			IEC/EN 62	109-1/-2, IEC	/EN 61000-6	5-1/-2/-3/-4		
Standard Warranty	1			10 Y	'ears			

Remarks: [1]: 3690(3680W for G98); [2]: 18(16.7A for G98); [3]: 5500(4999W for AS4777); [4]: 25(22.7A for AS4777);





The Livoltek GT1 7.0 / 8.0 / 9.0 / 10.0-T2 photovoltaic inverter is developed specifically for high-power single-phase residential models, offering compatibility with complex rooftops, private residences, villas, and small commercial applications. It features three MPPTs, each with an input current of 16A, making it suitable for high-efficiency large modules and significantly increasing power generation. With a built-in SPD II module, it reduces external installation costs for labor and wiring. The local AP mode and remote Wi-Fi dual monitoring provide users with the best inverter performance, convenience, and stability.



#### Features

- 3 MPPTs trackers
- Built-in Type II DC&AC SPD
- 24/7H live monitoring both online
- DC input 16A per string
- Integrated arc fault circuit interrupter (Optional)
- Limitation Export control





**Export Limitation** 



Optional AFCI Module



7\*24 Remote Monitoring



Wi-Fi Dongle



Smart Meter



Monitoring System

Model	GT1-7KT2	GT1-8KT2	GT1-9KT2	GT1-10KT2				
PV Input								
Max. DC Input Power	10500Wp	12000Wp	13500Wp	15000Wp				
Max. DC Input Voltage		60	00V	· · · · ·				
Min PV Input Voltage		70V						
Start-up DC Input Voltage		9(	٥V					
Nominal DC Input Voltage		36	60V					
MPPT Operating Range		70-5	560V					
Max. DC Input Current		16A+10	6A+16A					
Max. Short Circuit Current		20A+20	0A+20A					
No. of MPPTs/Strings per MPPT		3	/1					
AC Output								
Nominal Output Power	7000W	8000W	9000W	10000W				
Max. Apparent Power	7700VA	8800VA	9900VA	11000VA				
Rated AC Grid Output Current	31.8A	36.4A	40.9A	45.5A				
Max. AC Output Current	35A	40A	45A	50A				
Rated AC Grid Voltage		220V/230V/2	240V, L+N+PE					
AC Grid Voltage Range		154V-290V	(Adjustable)					
Rated Grid Frequency		50Hz	/60Hz					
Grid Frequency Range		45Hz-55Hz/55Hz-	-65Hz (Adjustable)					
Power Factor	> (	0.99 Rated Power (Adjustal	ble 0.8 Leading - 0.8 Laggi	ng)				
Output THDi (@Nominal Output)		<3	3%					
Efficiency								
Max. Efficiency	98.00%	98.00%	98.00%	98.00%				
Euro Efficiency	97.50%	97.50%	97.50%	97.50%				
MPPT Efficiency		>9	9%					
Protection								
Surge Arrester		Тур	be ll					
PV Current Detection		Sup	pport					
Over Current Protection		Sup	oport					
AC Short Circuit Protection		Sup	oport					
Over Voltage Protection		Sup	pport					
Anti-islanding Protection		Sup	pport					
Ground Fault Monitoring		Sup	pport					
Residual Current Monitoring Unit		Sup	pport					
DC Reverse Polarity Protection		Sup	oport					
Ac auxiliary power supply (APS)		Opt	ional					
Anti-arc Protection		Opt	Ional					
		405*400	*100					
Dimension (VV^H^D)		465*425	5*180mm					
Dretection Degree		19.	iokg					
Cooling		Natural	Cooling					
			Dorating at 45°C					
Night Solf Consumption		-50 C * +00 C (						
Display			+ΔPP					
Communication		RC/RE/M	oter) Wi-Fi					
Topology		Transfo	rmerless					
Certifications and Standards								
Grid Regulation			ARCH 21, 2022 IFFE154	7				
Safety/EMC Standard		IEC62109-1/-2 UI 174	1. IEC61000-6-1/2/3/4					
Standard Warranty		10 \	fears					





## **Grid Tied Inverter**

Single Phase: GT1-1K6/2K2/3K/3K3 S1

The LIVOLTEK GT1-1.6/2.2/3.0/3.3K-S1 is an economical mini inverter developed and designed for home use. GT1 series has advanced topology and precise MPPT algorithm, with the highest conversion efficiency up to 97.8%. It is suitable for different grid voltage ranges in many parts of the world, mainly covering 220V and 230V. Equipped with Wi-Fi and bluetooth dual wireless monitoring function, these inverters are convenient and easy to operated.



#### Features

- 150% DC/AC ratio
- Export limitation (optional)
- Smart APP to monitor & optimize
- AFCI (optional)
- Plug-and-play installation saves time
- 110% AC output for efficient power generation





Smart APP to Monitor & Optimize



Optional Internal Integrated AFCI Module



Plug-and-play Installtion Saves Time



Wi-Fi Dongle



Smart Meter



Monitoring System

Model	GT1-1K6S1	GT1-2K2S1	GT1-3KS1	GT1-3K3S1				
PV Input								
Max. PV Input Power	2400Wp	3300Wp	4500Wp	4950Wp				
Max. PV Input Voltage		550V						
Min. PV Input Voltage	50V							
Start-up Input Voltage								
Nominal Input Voltage		360	)V					
MPPT Voltage Range		50-5	45V					
Max. PV Current		14	A					
Max. Short Circuit Current		20	A					
No. of MPPTs/Strings per MPPT		1/	1					
AC Output								
Nominal AC Power	1600W	2200W	3000W	3300W				
Max. Apparent Power	1760VA	2420VA	3300VA	3300VA				
Rated AC Grid Output Current	7.0A	9.6A	13.0A	14.3A				
Max. AC Output Current	7.7A	10.5A	14.3A	14.3A				
Rated AC Grid Voltage		220V/230V/24	40V, L+N+PE					
AC Grid Voltage Range		160V-300V	(Adjustable)					
Rated Grid Frequency		50Hz/	60Hz					
Grid Frequency Range		45Hz-55Hz/55Hz-	65Hz (Adjustable)					
Power Factor	> 0.9	9 Rated Power (Adjustab	le 0.8 Leading - 0.8 Lag	ging)				
THDi, Rated Power[%]		<3	%					
Efficiency								
Max. Efficiency	97.5%	97.5%	97.8%	97.8%				
Euro Efficiency	96.9%	96.9%	97.3%	97.3%				
MPPT Efficiency		>99	9%					
Protection								
Surge Arrester		Type III / Type	II (Optional)					
PV Current Detection		Supp	port					
AC Short Circuit Protection		Supp	port					
Anti-islanding Protection		Supp	port					
Ground Fault Monitoring		Supp	port					
Residual Current Monitoring Unit		Supp	port					
DC Reverse Polarity Protection		Supp	port					
Anti-arc Protection		Optio	onal					
General Data	1							
Dimension (W*H*D)		280*300	*140mm					
Weight		6.5	kg					
Protection Degree		IP6	5					
Cooling		Natural	Cooling					
Operating Temperature Range		−30°C ~ +60°C (D	Perating at 45°C)					
Typical Noise Emission		<25	5dB					
Night Self Consumption		<1	VV .					
Display		LED+						
Communication		RS485 (Meter), Wi-	FI+Bluetooth, DRM					
		Transfor	merless					
Certifications and Standards								
	IEC01/2/, IEC02116,	ENDUD49, ABINT NBR 10	2149, ABNT NBR 16150	, UL 1/41, IEEE 154/				
Standard Warranty		E Voors/10 Vo	en 01000-0-1/-2/-3/-4					
Standard Anglight		5 rears/10 Yea	ars ioplional)					





# Grid Tied Inverter

Single Phase: GT1-3K6/4K/4K6/5K/6K D1

The LIVOLTEK GT1-3.6/4.0/4.6/5.0/6.0K-D1 inverter is specially designed for private residential PV systems and its compact design ensures minimal space requirements. Small in size and light in weight, it can be easily installed by one person. The inverter can optionally integrate the AFCI protection function inside, which can actively reduce the risk of fire as a high safety factor. In addition, it also supports a local bluetooth APP and remote dual monitoring, which is convenient and stable.



#### Features

- 150% DC/AC ratio
- Export limitation (optional)
- Smart APP to monitor & optimize
- AFCI (optional)
- Plug-and-play installation to save time
- 110% AC output for efficient power generation





Optional Internal Integrated AFCI Module

Plug-and-play Installation Saves Time





Wi-Fi Dongle



Smart Meter



Monitoring System

Model	GT1-3K6D1	GT1-4KD1	GT1-4K6D1	GT1-5KD1	GT1-6KD1		
PV Input							
Max. PV Input Power	5400Wp	6000Wp	7500Wp	9000Wp			
Max. PV Input Voltage	550V						
Min. PV Input Voltage			70V				
Start-up Input Voltage			90V				
Nominal Input Voltage			360V				
MPPT Voltage Range			70-545V				
Max. PV Current			14A+14A				
Max. Short Circuit Current			20A+20A				
No. of MPPTs/Strings per MPPT			2/1				
AC Output							
Nominal AC Power	3600W	4000W	4600W	5000W	6000W		
Max. Apparent Power	3960VA	4400VA	4600VA	5500VA	6600VA		
Rated AC Grid Output Current	15.7A	17.4A	20.0A	21.7A	26.1A		
Max. AC Output Current	17.2A	19.1A	20.0A	23.9A	28.7A		
Rated AC Grid Voltage		22	0V/230V/240V, L+N	+PE			
AC Grid Voltage Range		1	60V-300V (Adjustab	ole)			
Rated Grid Frequency			50Hz/60Hz				
Grid Frequency Range		45Hz-5	5Hz/55Hz-65Hz (Ad	ljustable)			
Power Factor		> 0.99 Rated Powe	er (Adjustable 0.8 Le	ading - 0.8 Lagging)			
THDi, Rated Power[%]			<3%				
Efficiency							
Max. Efficiency	98.2%	98.2%	98.4%	98.4%	98.4%		
Euro Efficiency	97.3%	97.3%	97.5%	97.5%	97.5%		
MPPT Efficiency			>99%				
Protection							
Surge Arrester		Ту	pe III / Type II (Option	nal)			
PV Current Detection			Support				
AC Short Circuit Protection			Support				
Anti-islanding Protection			Support				
Ground Fault Monitoring			Support				
Residual Current Monitoring Unit			Support				
DC Reverse Polarity Protection			Support				
Anti-arc Protection			Optional				
General Data							
Dimension (W*H*D)			350*315*176mm				
Weight			12.5kg				
Protection Degree			IP65				
Cooling			Natural Cooling				
Operating Temperature Range		-30°C	~ +60°C (Derating a	at 45°C)			
Typical Noise Emission			<25dB				
			< 1 VV				
		DC 405 /					
		KS485 (1	Transformer and a	DOIN, DRM			
Contifications and Standards			Transformerless				
Grid Population					17/1 1555 15/7		
Safaty/EMC Standard	ILCO1/2/, IECC	IEC/ENI 6210	9-1/-2 JEC/EN 6100	0_6_1/_2/_2/_4	1/ HI, IEEE 104/		
Standard Warranty		EC/LIN 0210	Pars/10 Years (Optio	unal)			





## **Grid Tied Inverter**

Single Phase: GT1-7K/8K T1

The LIVOLTEK GT1-7.0/8.0K-T1 PV inverters are developed for customers using high-power single-phase household models. This inverter is not only compatible with PV systems required for complex roofs, such as private homes or villas, but also powerful in small commercial and industrial scenarios. With an input current of 16A, it is suitable for high-efficiency large modules to enhance power generation in all aspects. The optional built-in SPD II module can effectively reduce external installation labor and wiring costs. Local bluetooth APP and remote dual monitoring provide users with the best inverter performance and maximum convenience and comfort.



#### Features

- 150% DC/AC ratio
- Export limitation (optional)
- Smart APP to monitor & optimize
- AFCI (optional)
- Plug-and-play installation saves time
- 110% AC output for efficient power generation





Max Efficiency of 97.5%



Optional Internal Integrated AFCI Module



Plug-and-play Installtion Saves Time



Wi-Fi Dongle



Smart Meter



Monitoring System

Model	GT1-7KT1	GT1-8KT1				
PV Input						
Max. PV Input Power	10500Wp	12000Wp				
Max. PV Input Voltage	550V					
Min PV Input Voltage	12	0V				
Start-up Input Voltage	90	V				
Nominal Input Voltage	36	0V				
MPPT Voltage Range	70-5	545V				
Max. PV Current	16A+10	5A+20A				
Max. Short Circuit Current	25A+25	5A+30A				
No. of MPPTs/Strings per MPPT	3.	/1				
AC Output						
Nominal AC Power	7000W	8000W				
Max. Apparent Power	7700VA	8800VA				
Rated AC Grid Output Current	30.4A	34.8A				
Max. AC Output Current	33.5A	38.3A				
Rated AC Grid Voltage	220V/230V/2	240V, L+N+PE				
AC Grid Voltage Range	160-300V	(Adjustable)				
Rated Grid Frequency	50Hz	/60Hz				
Grid Frequency Range	45Hz-55Hz/55Hz-	-65Hz (Adjustable)				
Power Factor	> 0.99 Rated Power (Adjusta	ble 0.8 Leading - 0.8Lagging)				
THDi, Rated Power[%]	<3	3%				
Efficiency						
Max. Efficiency	98.2	20%				
Euro Efficiency	97.50%	97.50%				
MPPT Efficiency	99.99%	99.99%				
Protection						
Surge Arrester	Туре III/Туре	e II (Optional)				
AC Short Circuit Protection	Sup	port				
Anti-islanding Protection	Sup	port				
Ground Fault Monitoring	Sup	port				
DC Reverse Polarity Monitoring	Sup	port				
Residual Current Monitoring Unit	Sup	port				
General Data						
Dimension (W*H*D)	410*345	*186 mm				
Weight	16.	8kg				
Protection Degree	Ч	65				
	Natural					
Operating Temperature Range	_30 °C~ +60 °C (	Derating at 45°C)				
Typical Noise Emission	<2	bdB				
	<					
Display						
	R5485 (Metre), Wi	-FI+Buletooth, DRM				
Contifications and Standards		meness				
Grid Pogulation						
Safaty		NDR 10149, ADINT INDR 10150				
EMC		103-1/-2				
Standard Warranty	IEC1000-0-1, IEC01000-0-2,	neco1000-0-3, IEC01000-0-4				
Stanualu vvaliality	5 reals/10 re					





### **Grid Tied Inverter**

Three Phase: GT3-4K/5K/6K/8K/10K/12K/15K/17K/20K/22K/25K D1

The LIVOLTEK GT3-4/5/6/8/10/12/15/17/20/22/25K-D1 PV inverter is developed for residential or commercial customers who need a three-phase rooftop model. The integrated shade fixing management system ensures the inverter to maximizes energy production even when the PV panels are lightly shaded. The machine has a built-in optional AFCI module to prevent electrical fires caused by abnormal arc faults in the electrical wiring as a high safety feature. With 160V ultra-low start-up voltage, ultra-long working time, it's surely an ideal choice for large commercial and industrial power plants.



#### Features

- 150% DC/AC ratio
- Export limitation (optional)
- Smart APP to monitor & optimize
- AFCI (optional)
- Plug-and-play installation saves time
- 110% AC output for efficient power generation





Support Export Limitation



Optional Internal Integrated AFCI Module



SPD II Protection



Wi-Fi Dongle



Smart Meter



Monitoring System

Model	GT3- 4KD1	GT3- 5KD1	GT3- 6KD1	GT3- 8KD1	GT3- 10KD1	GT3- 12KD1	GT3- 15KD1	GT3- 17KD1	GT3- 20KD1	GT3- 22KD1	GT3- 25KD1
PV Input											
Max. PV Input Power	6000Wp	7500Wp	9000Wp	12000Wp	15000Wp	18000Wp	22500Wp	25500Wp	30000Wp	33000Wp	37500Wp
Max. PV Input Voltage						1100V					
Min. PV Input Voltage						140V					
Start-up Input Voltage						160V					
Nominal Input Voltage						650V					
MPPT Voltage Range					1	.40V-1000	V				
Max. PV Input Current			16A+16A			40A-	-20A		40A	+40A	
Max. Short Circuit Current			21A+21A			52A-	-26A		52A	+52A	
No. of MPPTs			2			2	2			2	
No. of Strings per MPPT			1/1			2/	/1		2	/2	
AC Output											
Nominal AC Power	4000W	5000W	6000W	8000W	10000W	12000W	15000W	17000W	20000W	22000W	25000W
Max. Apparent Power	4400VA	5500VA	6600VA	8800VA	11000VA	13200VA	16500VA	18700VA	22000VA	24200VA	27500VA
Rated AC Grid Output Current	5.8A	7.2A	8.7A	11.5A	14.4A	17.3A	21.7A	24.5A	28.9A	31.8A	36.1A
Max. AC Output Current	6.4A	7.9A	9.5A	12.7A	15.9A	19.1A	23.8A	27.0A	31.8A	34.9A	39.7A
Rated AC Grid Voltage					3/N/PE, 22	0V/380V, 2	230V/400V	,			
AC Grid Voltage Range						270V-480V	/				
Rated Grid Frequency						50Hz/60Hz	<u></u>				
Grid Frequency Range					45Hz-	55Hz/55Hz	2-66Hz				
Power Factor			>	0.99 Rate	d Power (Ac	ljustable 0.	8 Leading	- 0.8Laggir	ng)		
THDi, Rated Power[%]						<3%					
Efficiency											
Max. Efficiency	98.50%	98.50%	98.50%	98.60%	98.60%	98.60%	98.50%	98.50%	98.60%	98.60%	98.60%
Euro Efficiency	98.10%	98.10%	98.10%	98.20%	98.20%	98.20%	98.10%	98.10%	98.20%	98.20%	98.20%
MPPT Efficiency						>99%					
Protection											
Surge Arrester						Type II					
PV Current Detection						Support					
AC Short Circuit Protection						Support					
Anti-islanding Protection						Support					
Residual Current Monitoring Unit						Support					
Integrated AFCI (Arc-Fault Circuit Protection)						Optional					
General Data											
Dimension (W*H*D)					520	)*420*193	mm				
Weight			22kg					2	4.5kg		
Protection Degree			IP65						P65		
Cooling		Na	tural Cooli	ng				Fan	Cooling		
Operating Temperature Range	-3	30°C~ 60	°C (Deratir	ng at 45°C)			-30	°C~ 60°C	(Derating a	at 45°C)	
Typical Noise Emission			<30dB					<	40dB		
Night Self Consumption						<1W					
Display						LED+APP					
Communication				RS	6485 (Meter	), Wi-Fi+Bl	uetooth, D	RM			
Certifications and Standards											
Grid Regulation				IEC6172	27, IEC6211	6, EN5054	9, CQC(NB	/T32004)			
Safety/EMC				I	EC62109-1	/2, EN6100	00-6-1/2/3	/4			
Standard Warranty					5 Years/	10 Years (C	)ptional)				





**Grid Tied Inverter** Product Release Soon Three Phase: GT3-30K/33K T1 GT3-36K/37K5/40K/50K/60K O1

LIVOLTEK GT3-30~60kW PV inverters are widely used in residential, commercial and industrial roofs. The maximum input current of each PV string is 20A, also compatible with 600W+ modules in the global markets. Combined with 3/4-way MPPT and precise algorithm, it's the ideal option for rooftop photovoltaic systems with complex orientations and various components. The inverters with wide operating voltage range of MPPT and low start-up voltage ensure longer working time and more power generation, supporting functions such as shadow scanning, remote operation and maintenance, so as to maximize continuous long-term benefits for end-users.



#### Features

- 24/7 live monitoring
- String current up to 20A
- AFCI function (optional)
- Night SVG function
- Export limitation (optional)
- Built-in PID recovery function





Night SVG Function



Optional Internal Integrated AFCI Module



Built-in PID Recovery Function



Wi-Fi Dongle



Smart Meter



Monitoring System

### Preliminary

Model	GT3-30KT1	GT3-33KT1	GT3-36KQ1	GT3-37K5Q1	GT3-40KQ1	GT3-50KQ1	GT3-60KQ1
PV Input							
Max. PV Input Power	45000Wp	49500Wp	54000Wp	56250Wp	60000Wp	75000Wp	90000Wp
Max. PV Input Voltage				1100V			
Start-up Input Voltage				180V			
Nominal Input Voltage				620V			
MPPT Voltage Range				180V-1000V			
Max. PV Input Current	40A/40	)A/40A		40	A/40A/40A/40	)A	
Max.Short Circuit current	52A/52	2A/52A		52	A/52A/52A/52	2A	
No. of MPPTs	3	3			4		
No. of Strings per MPP Tackers	2/2	2/2			2/2/2/2		
AC Output							
Nominal AC Power	30000W	33000W	36000W	37500W	40000W	50000W	60000W
Max. Apparent Power	33000VA	36300VA	39600VA	37500VA	44000VA	55000VA	60000VA
Rated AC Grid Output Current	45.6A	50.1A	54.7A	57.0A	60.8A	76.0A	91.0A
Max. AC Output Current	50.1A	55.2A	60.2A	57.0A	66.9A	83.6A	91.0A
Rated AC Grid Voltage			3/N/	PE.3/PE.380V/4	00V		
AC Grid Voltage Range <sup>[1]</sup>				310V~480V			
Rated Grid Frequency				50Hz/60Hz			
Grid Frequency Bange <sup>[2]</sup>			454	lz-55Hz/55Hz-6	5Hz		
Power Factor		> 0 99	Rated Power (	Adjustable 0.8 l	eading - 0.81 a	againa)	
		> 0.55	Trated I ower (	~3%		igging/	
Efficiency				<570			
Max Efficiency	00 500/	00 500/	0.0 5.00/	00 500/	00 500/	00 500/	09 5004
	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%	98.50%
	98.30%	98.30%	98.30%	98.30%	98.30%	98.30%	98.30%
MPPT Enciency				>99%			
Protection				Turall			
AC Short Circuit Protection				Support			
Anti-Islanding Protection				Support			
Shade Fix Function				Support			
Integrated PID recovery				Support			
AC Auxiliary Power Supply (APS)				Support			
Residual Current Monitoring Unit				Support			
Integrated AFCI (Arc-Fault Circuit Protection)				Optional			
General Data							
Dimension (W*H*D)			4	81*613*251mr	n		
Weight	44kg	44kg	44kg	47kg	47kg	47kg	47kg
Protection Degree				IP65			
Cooling				Fan			
Operating Temperature Range			-30°C ~ -	+60°C (Derating	) at 45°C)		
Night Self Consumption				<3W			
Display				LED+APP			
Communication			RS485 (	Meter/GEN/DRN	4), Wi-Fi		
Certifications and Standards							
Grid Regulation			IEC6172	7, IEC62116, E	EN50549		
Safety/EMC			IEC62109-	-1/-2; EN61000	-6-1/2/3/4		
Standard Warranty			5 Yea	rs/10 Years (Opt	tional)		





### **Off-Grid Hybrid Inverter** GF1-3K524S2/6K248S2/6K248P2

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. Thtegrate multiple protections and fault monitoring to ensure the safety of batteries and equipment.



#### Features

- Maximum efficiency up to 96%
- Safe, compact, reliable, and cost-effective
- Parallel operation with up to 12 units, support 1 & 3 phase
- Scalable battery up to 5 sets (25 kWh)
- Max. input voltage: 500V, MPPT range: 60~450V
- Support multiple output priority: UTL, SOL, SBU, SUB





Residential Lithium Battery



Monitoring System



Wi-Fi Dongle

Model	GF1-3K524S2	GF1-6K248S2	GF1-6K248P2			
Capacity	3.5kVA/3.5kW	6.2kVA/6.2kW	6.2kVA/6.2kW			
Parallel Capability	NO	NO	YES,12 Units			
Input						
Nominal Voltage		230V AC				
Acceptable Voltage Range	170-280V AC(For pe	ersonal Computer); 90-280V AC(Fc	or Home Appliances)			
Frequency		50/60 Hz(Auto sensing)				
Output						
Nominal Voltage		220/230V AC±5%				
Surge Power	7000VA	12400VA	12400VA			
Frequency		50/60Hz	·			
Waveform		Pure Sine wave				
Transfer Time	10ms(For per	sonal Computer); 20ms(For Home	Appliances)			
Peak Efficiency(PV to INV)		96%				
Peak Efficiency(Battery to INV)		93%				
Overload Protection	5s@≥140%load 10s@100%~140%load	5s@≥140%load 10s@100%~140%load	5s@≥150%load 10s@110%~150%load			
Crest Factor		3:1				
Admissible Power Factor		0.6~1(inductive or capacitive)				
Battery						
Battery Voltage	24V DC	48V DC	48V DC			
Floating Charge Voltage	27V DC	54V DC	54V DC			
OverCharge Protection	33V DC	63V DC	63V DC			
Charging Method		CC/CV				
Lithium Battery Activation		YES				
Lithim battery Communication		YES(RS485)				
Solar Charger & Ac Charger						
Solar Charger Type		MPPT				
Max.PV Array Power	4000W	6500W	6500W			
Max.PV Array Open Circuit Voltage		500V DC				
PV Array MPPT Voltage Range		60V DC~500V DC				
Max.Solar Input Current	15A	27A	27A			
Max.Solar Charge Current	100A	120A	120A			
Max.AC Charge Current	80A	80A	A08			
Max.Charge Current(PV+AC)	100A	120A	120A			
Physical						
Dimensions(D*W*H)	358*295*100 mm	438*295*105 mm	450*300*130 mm			
Package Dimensions(D*W*H)	465*380*175 mm	560*375*185 mm	540x390x210 mm			
Net Weight	8.2 kg	8.7 kg	12 kg			
Communication Interface	RS232+RS485	RS232+RS485	RS232/RS485/Dry-contact			
Environment						
Operating Temperature Range		(-10 °C ~50 °C )				
Storage Temperature		(-15°C~50°C)				
Humidity	5%to 9	95%Relative Humidity(Non-conde	nsing)			
Standard Warranty	2 Years					





### **Off-Grid Hybrid Inverter** GF1-3K24S1/3K48S1/5K48S1/6K48S1

The LIVOLTEK off-grid hybrid inverter is an important part of the off-grid solar power system. Built-in MPPT solar charge controller, integrated functions of a solar charger and battery charger, this smart solar inverter can be connected to the public grid and manage a PV system with a battery bank to offer continuous power. It can also run directly, without batteries, sharing energy from utility and solar to loads alternatively. Free app to monitor your solar system both locally (with the integrated bluetooth) and remotely (via an optional Wi-Fi module) at any time.



#### Features

- Maximum efficiency up to 98%
- Parallel operation with up to 3 units
- Safe, compact, reliable, and cost-effective
- Scalable battery up to 5 sets(25KWh)
- Max. Input Voltage: 500V, MPPT range 60~450V
- Automatic switching 2 mode: Backup/Economic Mode



Parallel Support up to 3 Units



Wi-Fi/Bluetooth



Lead-acid/ Lithium Battery





Residential Lithium Battery



Optical LCD Screen



Monitoring System

Model	GF1-3K24S1	GF1-3K48S1	GF1-5K48S1	GF1-6K48S1		
Capacity						
Rated Power	3000VA /3000W	3000VA /3000W	5000VA /5000W	6000VA /6000W		
Peak Power	6000VA	6000VA	10000VA	10000VA		
PV Input Data						
Max. PV Input Power	3600Wp	3600Wp	6000Wp	6000Wp		
Max. PV Input Voltage		50	0V			
MPPT Voltage Range	60V~450V		90V~450V			
Max. PV Current	14A	14A	25A	25A		
Max.Short Circuit Current	17A	17A	31.25A	31.25A		
No. of MPPTs/Strings per MPPT	1/1	1/1	1/2	1/2		
AC Input Data			1			
Input Voltage Waveform		Sinus	soidal			
Rated Input Voltage		23	0V			
Selectable Voltage Range		170~280V (Computers)	90~280V (Appliances)	)		
Rated Input Frequency		50Hz	/60Hz	·		
Frequency Range		45-55Hz	/55-65 Hz			
Max. AC to DC Efficiency	>93%	>95%	>95%	>95%		
Max. Input Current	13.0 A	13.0 A	21.7 A	27 A		
AC Output Data						
Output Waveform		Pure Sir	ne Wave			
Rated Power	3000VA /3000W	3000VA /3000W	5000VA /5000W	6000VA /6000W		
Peak Power	6000VA	6000VA	10000VA	12000VA		
Rated Voltage	220/230/240V±5%	220/230/240V±5%	220/230/240V±5%	220/230/240V±5%		
Typical Transfer Time		10	ms			
Surge Power		10sec (110% ~ 150%)	, 2sec (150% ~ 200%)			
Max. Efficiency (PV to AC)		98	3%			
Max. Efficiency	94%	95%	95%	96%		
Rated Grid Frequency		50Hz	/60Hz			
Grid Frequency Range		45-55Hz	/55-65 Hz			
Power Factor			1			
THDv, Rated Power[%]		<3	3%			
Battery & Charger						
Battery Type		Lead-aci	d/Lithium			
Rated Battery Voltage	24V		48V			
Charging Algorithm		3-9	Step			
Communication with BMS		CA	AN			
Solar Charger Type		MF	PPT			
Max. Solar Charging Current	120A	60A	100A	100A		
Max. AC Charging Current	120A	60A	100A	100A		
Max. Charging Current	120A	60A	100A	100A		
General Data			I			
Dimension (W*H*D)	317*507*123 mm		338*485.5*147.3 mm			
Weight	10kg	11kg	12kg	12kg		
Protection Degree		IP	21			
Cooling		Fa	an			
Operating Temperature Range		- 10°C	~ 55°C			
Standby Power Consumption		< 1	5W			
Display		LED+APP/ LO	CD (Optional)			
Communication	CAN/USB/	/Dry Contact/Bluetooth/	NTC/ RS485/Wi-Fi/LCD	(Optional)		
Standard Warranty	2 Years					





### Off-grid: ESS Inverter SF1z1K12100/SF1-1K12100

ESS Hybrid Inverter is an integrated facility that helps your home develop a solar power system for your daily electricity needs, so you can rely less on the utility grid, no longer worry about unstable power suppliers, and use green power and your own PV system. The energy storage system allows you to store solar energy for later use. Its integrates DC ports and AC ports. Its box-type design is easy to place, and the top handle design makes it easy to move. It can be used anytime, anywhere, making your life more convenient and environmentally friendly.



#### Features

- Compact, reliable, and cost-effective design
- 3 times peak power with high loading capability
- 3 operating modes: AC first/Solar first / Energy-saving
- All-in-one combination of inverter, solar controller, and battery
- Multiple output: 2 AC sockets, 4 DC 12V ports, and 2 USB ports
- PV Input Current 40Amax; Grid+PV Input Current 55A





3x Peak Power





#### **Compatible Products**



Low-Voltage Residential Battery (12V 100Ah)



Wi-Fi Dongle



Monitoring System

Model	SF1z1K12100	SF1-1K12100					
Capacity							
Rated Power	1000VA /1000W						
Peak Power(20ms)	3000VA						
PV Charger Data							
Solar Charger Type	-	PWM					
Max. PV Input Power	-	560Wp					
Max. PV Input Voltage	_	50V					
MPPT Voltage Range	-	15V~44V					
Max. Solar Charging Current	_	40A					
AC Input Data							
Input Voltage Waveform	Sinus	oidal					
Rated Input Voltage	230	Vac					
Selectable Voltage Range	170~285V (Computers)	/ 90~285V (Appliances)					
Rated Input Frequency	50Hz/	60Hz					
Frequency Range	45-55Hz /	55-65 Hz					
Max. Input Current	4.5	δA					
Output Data							
AC Output Waveform	Pure Sin	e Wave					
AC Start Motor	11	łP					
AC Output Rated Voltage	220/230/2	40V±10%					
AC Output Typical Transfer Time	<4	ms					
AC Output Surge Power	100%~110%(Alarm), 110% ~	· 120%(30sec), >120%(2sec)					
AC Max. Efficiency (Battery Mode)	85	%					
Rated Frequency	50Hz/	60Hz					
Power Factor	1	-					
THDv. Rated Power[%]	<3	%					
DC Output voltage	4*DC 12V:	2*USB(5V)					
Battery & Charger							
Inbuilt Battery Type	Lead	-acid					
Inbuilt Battery Capacity	1*10	0AH					
	12	2					
Rated Battery Voltage	Charge Voltage :14.2V: Float Volta	ge:13.8V (Single Battery Voltage)					
Charging Algorithm	3-Step (Constant Current, Cons	stant Voltage. Floating Charge)					
Max. Charging Current	15A	55A(PV+AC)					
Protection							
System Protection	Battery undervoltage alarm/protection,Batt power protection,Inverter output short c	ery overvoltage alarm/protection,Overload ircuit protection,Temperature protection					
Working Mode							
Working Mode	Battery First/AC First/Saving Energ	y Mode/Solar Fisrt(SF1-1K12100)					
General Data							
Protection Degree	IP2	21					
Cooling	Fa	in					
Operating Temperature Range	- 10°C -	~ 40 <sup>°</sup> C					
Display	LCD						
Communication	NTC/ RS4	85/Wi-Fi					
Dimension (W*H*D)	488*232*	*450 mm					
Net Weight (Without Battery)	16	kg					
Packing Dimension (W*H*D)	550*295*	*625 mm					
Gross Weight (Without Battery)	21	kg					
Packing Ouantity/CTN	1pcs per W	ooden case					





#### **Off-grid: Backup 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





3x Peak Power





#### **Compatible Products**



Residential Lithium Battery



Optical LCD Screen



Monitoring System

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	-	-	М	PPT			
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		Sinus	oidal				
Rated Input Voltage		230	Vac				
Selectable Voltage Range	1	70~285V (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		220/230/24	0V±10%				
Surge Power	$\frac{100\% - 110\% (Alarm)}{110\%} = 120\% (30 \text{ sec}) > 120\% (2 \text{ sec})$						
Max. Efficiency(Battery Mode)		859	6				
Rated Frequency	50Hz/60Hz						
Typical Transfer Time		<4n	าร				
Power Factor		1					
THDv, Rated Power[%]		<39	6				
No Load Loss(Battery Mode)		≤0.8% rate	d power				
No Load Loss(AC Mode)	≤2%	rated power(charger do	bes not work in AC mod	de)			
No Load Loss (Energy Saving Mod	e)	≤10 <sup>\</sup>	N	,			
Battery & Charger							
Battery Type		Lead-a	cid				
Datad Dattary / Valtaga	12V	24V	12V	24V			
Rated Battery voltage	Charge Volta	age :14.2V; Float Voltad	ge:13.8V(Single battery	voltage)			
Charging Algorithm	3-Step(C	onstant Current, Consta	ant Voltage, Floating Ch	harge)			
Max. Charging Current	15A	20A	55A(PV+AC)	80A(PV+AC)			
Protection							
System Protection	Battery undervo tery overvolta	oltage alarm/protection, age recovery voltage/Ov short circuit protectior	Battery overvoltage ala verload power protectio n/Temperature protectic	arm/protection,Bat- n,Inverter output on			
Working Mode							
Working Mode		Battery First/AC First/S	aving Energy Mode				
General Data		,					
Dimension (W*H*D)		500*300*1	40 mm				
Weight	1	2kg	2	4ka			
Protection Degree		IP21					
Cooling		Fan					
Operating Temperature Range		- 10°C ~	55°C				
Display		LCD	)				
Communication		NTC/ RS48	5/Wi-Fi				
Standard Warranty	2 Years						





### **Off-grid: MPPT Solar Controller**

SCC-30124/60124/3048/6048

MPPT (Maximum Power Point Tracking)Solar Charge Controller offer an efficient, safe, multi-stage recharging process that prolongs battery life and assures peak performance from a solar array. Each Charge Controller allows customized battery recharging.



#### Features

- Tracking efficiency up to 99%
- Full range of electronic protection functions
- Ultra wide photovoltaic input voltage range, more convenient systemconfiguration
- Intelligent battery management function, extending battery life
- It supports a variety of lead-acid batteries and lithium batteries, and users
- cancustomize the charging and discharging parameters





WiFi Li-thium/Gel/ Lead-acid

#### **Compatible Products**



Residential Lithium Battery



Monitoring System

Model	SCC-30124	SCC-3048	SCC-60124	SCC-6048		
Capacity						
Rated Current	30	A	60	A		
PV Input	1					
Max. PV Input Power	12V system: 140W( 24V system: 280W(10 48V system: 560W(104	10A)/280W(20A)/420W A)/560W(20A)/840W(3 A)/1120W(20A)/1680W	(30A)/560W(40A)/700V 0A)/1120W(40A)/1400 (30A)/2240W(40A)/280	W(50A)/840W(60A); W(50A)/1680W(60A); 0W(50A)/3360W(60A)		
Max. PV Input Voltage(Voc)		120V@12V/24	4V,180V@48V			
MPPT Voltage Range	12V system: 1	5V-80V; 24V system:	30V-100V; 48V syste	em: 60V-140V		
Recommended Operating Voltage Range	12V system:	15V-30V; 24V system	n: 30V-60V; 48V syste	em: 60V-90V		
Max. PV Current/Short Circuit Current	14A/17A 14A/17A					
Battery & Charger						
Battery Type	Lead acid battery/Lithium battery (Users can customize charging parameters for other types of batteries)					
Floating/Charge Voltage	13.8V/14.2V/Single battery					
Charging Mode/Method	MPPT maxim	um power point tracki	ng/Three stages: CC(N	/IPPT); CV; CF		
Protection	Over-voltage/unde	r-voltage/over-temper	ature/Anti-reverse cor	nnection protection		
Communication with BMS		RS4	185			
Conversion Efficiency		>98	3%			
General Data						
Machine Size(L*W*H)	214*155*	72.8 mm	238*180	*82 mm		
Thermal Method		Cooling fan in in	telligent control			
Type Of Mechanical Protection		IP:	20			
Operating Temperature		-15°C~	~+50°C			
Display		LCD-	-APP			
Standard Warranty		2 Ye	ears			



### Residential AC Charger Single Phase:3.7kW/7.3kW Three Phase: 11kW/22kW

The LIVOLTEK Smart EV Charger is the most cutting-edge smart charger available for wall and column installation. It is compact in size, exquisite in appearance, and easy to install. Thanks to its user-friendly APP, it is easy for users to charge independently and economically. It's surely the best choice for passenger vehicle owners to charge their vehicles by taking the advantage of the time of use tariff and PV system.

W Type2 Connector

#### Features

- Built-in RCD protection
- Low standby power consumption
- 3 charging modes: Fast, Dynamic, ECO
- Real-time load management and demand response
- IP54 provides high adaptability
- Compatible with all branded EV
- Wi-Fi/4G/Ethernet communication
- OCPP compliance enables backend system integration





**Dynamic Charging** 



Time of Use Schedule





OTA Remote Access



All-in-one Energy Storage System



DCM



Smart Meter



Monitoring System

Model	A0070230E11	A0110400E11	A0220400E11			
Product Name	Single-phase Residential AC Charger	Three-phase Residential AC Charger	Three-phase Residential AC Charger			
Input/Output						
Rated Power	7.3kW	11kW	22kW			
Rated Voltage	230Vac±10%	400Vac±10%	400Vac±10%			
Rated Frequency		50Hz/60Hz				
Current Range	6~32A	6~16A	6~32A			
Charging Interface Type		Type 2/5m				
Specifications of Incoming Cables	3*6mm²	5*2.5mm²	5*6mm²			
Basic Features						
User Authorization	Free Charging, N	/yLivoltek APP(Bluetooth & Remo	ote & Schedule )			
Cooling		Natural Cooling				
Operating Temperature		$-30^\circ\mathrm{C}\sim50^\circ\mathrm{C}$				
Storage Temperature		$-40^\circ\mathrm{C}\sim70^\circ\mathrm{C}$				
Operating Humidity		5%~95%RH				
Operating Altitude		≤2000m				
IP Degree	IP54					
Dimension (W*H*D)	170*400*110mm					
Weight	3.7kg	5.1kg				
Way of Installation	١	Wall Mounting (Column Optional)				
Energy Management		Support				
Standby Power Consumption		<5W				
Other Features						
Status Indication		3 Color LED				
Firmware Upgrade		Local/OTA				
Way of Communication	Blu	uetooth; Wi-Fi/Ethernet/4G Option	nal			
Emergency Stop Protection		Support				
Save Charging Record When Power Off		Support				
Electricity Measurement		Build-in Metering Chip				
External Communication		RS485/CAN				
Communication Protocol		LIVOLTEK Protocol / OCPP 1.6J				
Protection Function						
Residual Current Protection		6mA DC RCD Internal				
Multiple Protection	With Over Voltage Prot Grounding Protect Self-chec	ection, Under Voltage Protection, ion, Surge Protection, Short Circu k and Other Multiple Protection F	Overcurrent Protection, t Protection, Fault unctions.			
Standard						
EMC		IEC-61851-21-2-2018				
Safety	IEC-61851-1-2017					





# **Residential AC Charger** Single Phase: 3.7kW/7.3kW Three Phase: 11kW/22kW

The LIVOLTEK smart EV charger is the most cutting-edge smart charger available for wall and column installation. Flexible compatibility with 3.7kW, 7.3kW, 11kW, and 22kW maximum power EVs, selectable socket outlet or connector type, it is also compact in size, exquisite in appearance and easy to install. Thanks to its combination with LIVOLTEK inverters and user-friendly APP operation, it is easy for users to charge intelligently and economically by forming a solar charging system, which includes inverters, batteries and some necessary accessories. It's the best choice for electric vehicle owners to charge their vehicles by taking advantage of the time-of-use tariff and photovoltaic system.



🐻 Type 2s Socket

💮 Type2 Socket

#### **Features**

- 3 charging modes: fast, dynamic, ECO
- OCPP 1.6J Protocol (subsequent free upgrade 2.0.1)
- Integrated leakage current monitoring (AC 30mA + DC 6mA)
  - **PV** Charging



**Dynamic Charging** 

- IP65, IK10 Protection
- RFID user authorization
- Smart dynamic load balance control



Time of Use Schedule



**OTA Remote Access** 

#### **Compatible Products**



All-in-one Energy Storage System



DCM



Smart Meter



Monitoring System

Model	A0030230E1SH	A0070230E1SH	A0110400E1SH	A0220400E1SH
Product Name	Single Phase Socket 3.7kW	Single Phase Socket 7.3kW	Three Phase Socket 11kW	Three Phase Socket 22kW
Input/Output				
Rated Power	3.7kW	7.3kW	11kW	22kW
Rated Input Voltage	230	Vac	400Vac	
Input Voltage Range	230Va	c±15%	400Vac±15%	
Rated Output Current	16A	32A	16A	32A
Output Current Range	6A~16A	6A~32A	6A~16A	6A~32A
Rated Frequency		50H	z/60Hz	
Grid Architecture		TT/TN-	-S/TN-C-S	
Charging Interface	Type2 socket, Type (5m/7m 2plug	2s socket (Optional) Cable Optional )	Type2 socket, Type (5m/7m 2plug	2s socket (Optional) Cable Optional )
Connection Mode		Ca	ase B	
Protection				
Leakage Current Protection		AC 30mA	A + DC 6mA	
Surge Protection		Su	pport	
Overvoltage Protection		Su	pport	
Undervoltage Protection		Su	pport	
Overcurrent Protection		Su	pport	
Grounding Protection		Su	pport	
Short Circuit Protection		Su	pport	
Over Temperature Protection		Su	pport	
General Data				
Dimension (W*H*D)		170X39	3X145 mm	
Weight	4.6kg	4.6kg	5.7kg	4.6kg
Installation Mode		Wall Mounting	(Column Optional)	
IP Degree			P65	
IK Degree			K10	
Cooling		Natura	al Cooling	
Working Temperature		-30 (	C~50°C	
Storage Temperature		-40 0	C~70°C	
Working Humidity		5%~	95% RH	
Working Altitude		≤2	000m	
Working Noise		(	DdB	
Standby Power		<	<5W	
User Indicator		LEC	)+APP	
Networking Mode		Bluetooth; Ethernet	; Wi-Fi/4G (Optional)	
User Authorization	Free C	harging, RFID, MyLivoltek A	PP(Bluetooth & Remote & S	Schedule )
Charging Mode		Fixed, Dem	and Response	
Power Management		Su	pport	
Firmware Update		Loca	al / OTA	
Electricity Metering		Su	pport	
Save Charging Record When Power Off		Su	pport	
External Communication		RS48	35 / CAN	
Communication Protocol		LIVOLTEK Pro	tocol / OCPP 1.6J	
Standard				
EMC		IEC-6185	1-21-2-2018	
Safety		IEC-618	51-1-2017	





# **Commercial AC EV Charger** Single Phase: 7.3kW Three Phase: 11kW/22kW

Livoltek Commercial AC EV charger series with IP65 outdoor design can adapt to any business, workplace, commercial and home locations as well. LIVOLTEK offering stylish, intelligent and customoziable covers, selectable socket outlet or connector, always one you like. While equipped with build-in smart KWH meter, it also has the ability to reponse to external energy meter or dynamic load management terminals, ready for integrating with your advanced smart building and parking energy system.

#### **Features**

- Connector or Socket Outlet Selectable
- Integrated ISO 14443 RFID reader
- Multi connectivity access
- OCPP 1.6J Protocol (subsequent free upgrade 2.0.1)
- Build-in KWH meter
- Integrated leakage current monitoring (AC 30mA + DC 6mA)
- External Dynamic Load Response Ready
- IP65 Outdoor Design





Customzied Cover Design

#### Accessory



**Rectangle Stand** 



Intelligent Management

**Triangular Stand** 



Dynamic Load Response Ready



CMS Ready with OCPP1.6J



Type2 to Type2s EV Charing Cable



LIVOLTEK Smart Charging System

Model	A0070230E1EY	A0070230E1SY	A0110400E1EY	A0220400E1EY	A0110400E1SY	A0220400E1SY
Product Name	Single Phase	Single Phase	Three Phase	Three Phase	Three Phase	Three Phase
Input/OutpuB15:B53	Connector 7.3kVV	Socket 7.3kVV	Connector 11kvv	Connector 22kvv	Socket 11kVV	SOCKEL ZZKVV
Rated Power	7 3kW	7 3kW/	111/1/	22kW	111/1/	22kW
Rated Input Voltage	230		TIKVV	400		LLNV
Input Voltage Range	230\/a	c+15%		400	0vac	
Rated Output Current	230 Va	20	164	324	164	31A
Output Current Range	64~	324	6A~16A	6A~32A	64~164	6A~32A
Rated Frequency		02/1	50	)Hz	0/11/0/1	0,1,02,1
Input Cable Specification	5*6Φ	/	5*2.5Φ	5*6Φ	/	/
Grid Architecture			TT/TN-9	5/TN-C-S		
Charging Interface	Type2 Connector, 5m/7m cable (Optional)	Type2 socket (Type 2s socket Optional)	Type2 C 5m/7m cab	onnector, le (Optional)	Type2 socket, Type 2 (5m/7m 2plug	2s socket (Optional) Cable Optional )
Connection Mode	Case C	Case B	Cas	se C	Cas	se B
KWH Meter		1	Build-in MID cert	ify meter, class B	1	
Protection						
Leakage Current Protection			AC 30mA	+ DC 6mA		
Surge Protection			Sup	port		
Overvoltage Protection			Sup	port		
Undervoltage Protection			Sup	port		
Overcurrent Protection			Sup	port		
Grounding Protection			Sup	port		
Short Circuit Protection			Sup	port		
Over Temperature Protection			Sup	port		
General Data						
Dimension (W*H*D)			170X3932	X145 mm	1	1
Weight	6.1kg	5kg	6.1kg	6.7kg	5.9kg	6.6kg
Installation Mode		Wal	ll mounted (Colun	nn mounted optior	nal)	
IP Degree			IPe	65		
IK Degree			IK:	10		
Cooling			Natural	cooling		
Working Temperature			-30°C ~	~ <b>50</b> °C		
Storage Temperature			-40°C ~	~70°C		
Working Humidity			5%~9	5% RH		
Working Altitude			≤200	00 m		
Working Noise			0c	IB		
Standby Power			<5	5W		
User Indicator			LE	D		
Networking Mode		BI	uetooth, Ethernet,	, WiFi/4G (optiona	il)	
Power Management			Sup	port		
Firmware Update			Local			
			RFID(ISO 14	4443), APP		
Save Charging Record When Power Off			Sup	port		
External Communication			RS485	/ CAN		
Communication Protocol			OCPF	9 1.6 J		
Standard						
EMC			IEC-61851	-21-2-2018		
Safety			IEC-6185	1-1-2017		





## Smart DC EV Charger

60kW/120kW + 22kW AC Optional Product Release Soon



CCS2



#### AC&DC charging all-in-one design, maximum 120kW DC output for quick and flexible charging.

LIVOLTEK All-in-one fast charging system is integrated with CCS, CHAdeMO and AC connectors, supporting charging three electric vehicles at the same time and introducing a retractable cable management system for effortless pick-up and drop-off without touching the ground. It complies with all IEC standards for off-board electric vehicle charging systems, including IEC 61851-21-2 EMC requirement and IEC 61851-24 digital communication control.



#### **Features**



Future-proof design via open industry standards, support remote update to OCPP2.0.1 protocol.



CE, UKCA and RoHS certification, suitable for all European countries need



Multi Outlet Compliance with CCS2. CCS1, CHAdeMO, GB/T, Type2 socket & connector.



Interaction via 10"color touch display



Multi User Authorization with RFID, APP, customized NFC payment



Load management & real-time demand response ready with Livoltek DCM



Integrated retractable cable management system



MID Compliance Meter



unit: mm

Model	M0601000E3 M1201000E3	
Product Name	Fast Charge Station	
Input/Output Data		
Rated Power	DC 60kW/120kW + AC 22kW Optional	
AC Connection	3P+N+E	
AC Input Voltage	260~530Vac	
AC Input current.	0~264A	
Rated Frequency	50/60Hz	
Power Factor	≥0.99 at norminal load	
THD	≤5% (50%~100% load)	
Output Voltage Range	150~1000Vdc	
Output Constant Power	300~1000Vac	
Output Current Range	CCS2/CCS1: 0~250A CHAdeMO: 0~125A Type2 AC: 6~32A (Optional)	
Output Efficiency	≥95% (100% Load)	
Basic Features		
Environment of use	Indoor / Outdoor	
User Authorization	RFID (ISO 14443 A/B), APP, Contactless NFC Customized	
Working Noise	80dB (Peak), $\leq$ 70dB (Nominal Load)	
Operating Temperature	-20°C ~50°C	
Storage Temperature	-30°C ~70°C	
Working Humidity	5%~95% RH	
Working Altitude	≤2000m	
IP/IK Degree	IP54/IK10	
Cooling	Force Fan Cooling	
Dimension(W*H*D)	910*1750*575 mm	
Energy Management	Support	
Weight	≤300kg	
Standby Power Consumption	≤40W	
Length of Charging Cable	5m / 7m customized	
Standard Warranty	2 years, extend + 1 year / + 2 years	
Other Features		
Firmware Upgrade	Local (USB) / OTA	
Way of Communication	4G/Ethernet	
Save Charging Record When Power Off	Support	
External Communication	RS485/CAN	
Communication Protocol	OCPP 1.6J, support update to OCPP 2.0.1	
User Interface	10.1" Touch Screen; Charging LED Indicators	
Protection		
Multiple Protection	Overvoltage Protection, Undervoltage Protection, Overcurrent Protection, Over Temperature Protection, Grounding Protection, Surge Protection, Short Circuit Protection, Fault Self-check, In sulation Detection and Other Multiple Protection Functions.	
Leakage Current Protection	Type B RCBO for AC Type A RCD for DC	
Standards		
Safety	IEC 61851-1, IEC-61851-23, IEC 61851-21-2, IEC 62196-2/3	
EMC	IEC 61851-21-2 Class B	
Communication	IEC 61851-24, DIN 70121, ISO/IEC 15118	_

\* Will be launched in 2024.Q2





#### **Energy Monitoring System** APP / Web

The LIVOLTEK Energy Monitoring System provides live status updates and graphical analysis that you need for smarter, simpler management of your system to optimise use of your solar generation and save money through time of use functions to match electricity import tariffs. The remote access enables O&M by installers without site visits.



#### **Communication Module**



Wi-Fi Dongle



Build-in Wi-Fi/ Ethernet Stick



Build-in 4G Stick & Antenna



Build-in Wi-Fi/Ethernet Stick





**Eliminate Your Billing Revenue** 



My Livoltek App **Cloud Monitoring** 



View All Home Power Flows

Inverter



Track Your Home Generations & Consumption

Intelligent E-mobility Charging Schedule



Smart EV Charger



Smart Meter



### **Contact:**

#### Hangzhou Livoltek Power Co., Ltd. (China)

Add: 1418-35 Moganshan Road, Hangzhou, 310011, China Tel: +86 157 1576 8455 Email: info@livoltek.com

#### KBK Electronics (Pvt) Ltd. (Pakistan)

Add: Office#5,7th Floor Shaheen Complex, Egerton Road, Lahore Tel: +92 0308 9600 002 Email: sales.pk@livoltek.com

#### Livoltek U.K. (U.K.)

Add: 55 Holloway Head, Birmingham B1 1HP, UK Tel: +44 759 758 7947 Email: info@livoltek.com

#### HEXING Brazil Holding Ltda. (Brazil)

Add: Av. Paulista, 1337 - E	Bela Vista, São Paulo-SP-01311-200
Tel: +55 11 93338-1338	Email: sales.br@livoltek.com

#### Hexing Electrical SA (Pty) Ltd. (South Africa)

Add: 82 Roan Crescent, Corporate Park North, Midrand, Johannesburg, South Africa Tel: +27 067 781 4887 Email: sales.sa@livoltek.com

#### Livoltek Europe BV

Add: Gruttostraat 9, 5212 VM, 'S-Hertogenbosch, Netherlands Tel: +31 512 788 166 Email: sales.eu@livoltek.com