

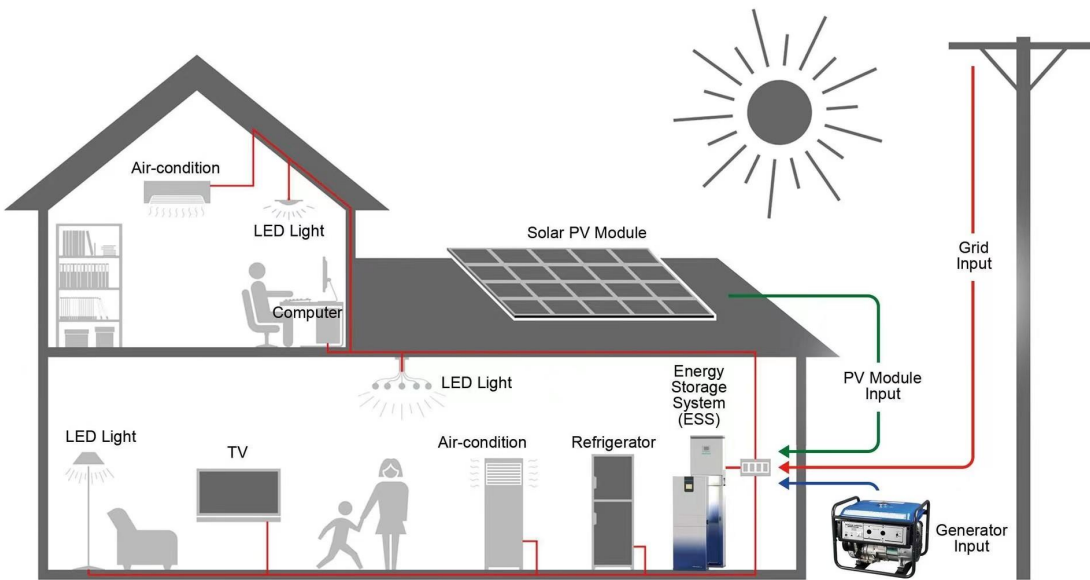
Company Profile

CVTE's main business is LCD display main control board and interactive smart tablet, Products have been widely used in the field of home appliances, education informatization, enterprise services, etc. Always committed to improving the user experience of products through product innovation, R&D and design, and continuously creating value for customers and users.

At present, the annual revenue exceeds 20 billion, China's top 500 manufacturing enterprises, the cumulative number of patents granted exceeds 6,700, the ranking of invention authorized patents of Chinese enterprises ranks 54th, the average annual design and production of PCBA exceeds 80 million, and the annual purchase volume of electronic materials exceeds 10 billion yuan.

The company has been engaged in the research and development of power supply since 2010, and the current annual shipment reaches 60 million pieces, Since 2016, it has expanded to all display fields, and display power supplies have achieved a leading position in the industry; In 2019, the inverter product line was established, and the annual shipment of inverters has exceeded 100K pieces; In 2021, the power electronics BG was established to become a comprehensive solution manufacturer of power electronic products.

System application diagram



PRODUCT
INTRODUCTION

Energy Storage System Product

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High efficiency

High power density, Low cost and easy assembly
UPS, Switch within 10ms
High charge and discharge efficiency,
Compatible with lead-acid and lithium batteries

Safe and reliable

Support lithium battery activation wake-up start function
Functional protection: Over temperature, overload, over voltage, over current, short circuit protection

Easy touse

Rich customization settings

Electrical characteristics

Model		FI5000E	FI3000E
Project	Specification	Parameter	Parameter
Parallel	Parallel quantity	9	NA
Input	Capacity	5000VA	3000VA
	Rated input voltage	208/220/230/240VAC(50/60Hz)	
Output	Voltage	220VAC	
	Power Factor (PF)	1	1
	Output frequency	Line Mode: Follow the mains frequency, Battery Mode: 50/60Hz±0.1%	
Efficiency	Battery Mode	93%@48VDC	91%@24VDC
	Solar Charger Type	MPPT	
Charger	Max PV input power	5500W	4000W
	MPPT Range@Operating Voltage	120~450Vdc	
	Max PV Open Circuit Voltage	500Vdc	
	Max PV Charge Current	80A	120A
	Max AC Charge Current	80A	120A
	Max Charge Current	80A	120A
Battery	Normal Voltage	48VDC	24VDC
	Floating Charge Voltage	54VDC	27VDC
	Overcharge Protection	56.4VDC	28.2VDC
Environment	Environment Temperature	0°C ... +45°C	
Weight	Net Weight	8.45kg	8.1kg
Size	Dimensions(W*H*D)	490*312*125mm	

**High efficiency**

Advanced MPPT technology,
efficiency up to 99.9%
UPS, Switch within 10ms
High charge and discharge efficiency,
improve system economic benefits

Easy touse

Rich customization settings
Self-contained battery,
capacity&power are optional
Easy to move with wheels
(detachable and portable)

Safe and reliable

With multiple protection functions
Functional protection: Over temperature,
overload, over voltage, over current, short
circuit protection

**Electrical characteristics**

Model		FS5000E	FS500024E
Input	Power Capacity	5000VA	10000VA
	Battery Capacity	6000Wh	24000Wh
	Rated input voltage	208/220/230/240VAC(50/60Hz)	
Output	Voltage	220VAC	
	Power Factor (PF)	1	
	Output frequency	Line Mode: Follow the mains frequency, Battery Mode: 50/60Hz±0.1%	
Efficiency	Battery Mode	93%@48VDC	
Charger	Solar Charger Type	MPPT	
	Max PV input power	5500W	1100W
	MPPT Range@Operating Voltage	120~450Vdc	
	Max PV Open Circuit Voltage	500Vdc	
	Max PV Charge Current	60A	120A
	Max AC Charge Current	60A	120A
	Max Charge Current	60A	120A
Battery	Normal Voltage	48VDC	
	Floating Charge Voltage	54VDC	
	Overcharge Protection	56.4VDC	
Environment	Environment Temperature	0°C ... +45°C	
Weight	Net Weight	147kg	294kg
Size	Dimensions(W*H*D)	550*520*600mm	550*520*1200mm

Safe & Reliable

Passed IEC/EN62109-1/-2, IEC/EN62477-1,
South Africa NRS097-2-1:2017,
IEC/EN 61000-6-1, IEC/EN 61000-6-3 test certification;

Friendly & Flexible

Support multi-parallel connection;
Support flexible access of diesel generator;
Compatible with lead-acid and lithium-ion battery;

Economical & Practica

Support intelligent EMS management function;
Support on/off-grid automatic switching function to
ensure uninterrupted power when important loads are off-grid;

**Electricalcharacteristics**

Model		GI6000P
Project	Specification	Parameter
PV Input	Max PV input power (KW)	7
	Max PV Open Circuit Voltage (V)	550
	MPPT Range@Operating Voltage (VDC)	125~500
	Max. Input Current(A)	14
	MPPT Tracker/Strings	2/1
AC Output	Rated Power (kW)	6
	Max. Output Current(A)	26
	Nominal Voltage/Range(V)	230/176~270, 50 /60 Hz, L+N+PE
Battery	Battery Voltage Range(V)	40~58
	Max. Charging Voltage(V)	58
	Charge/Discharge Current(A)	95/110
	Communication Interface	CAN/RS485
EPS Output	Rated Power (kW)	6
	Rated Voltage(V)	230
	Overload Capacity	110%, 30S/120%, 10S/150%, 0.02S
General Data	Ingress Protection	IP65
	Operation Temperature	- 25°C ~ 60°C
	Cooling	Natural
	Dimensions W * D * H (mm)	550*200*515
Display Communication	Display	LCD
	Interface:RS485/Wifi/4G/CAN/DRM	Yes/ Opt/ Opt/ Yes/ Yes
	Safety	IEC/EN62109-1/-2, IEC/EN62477-1
	EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-3
	Grid	South Africa NRS097-2-1:2017, UK G98,G99

Safe & Reliable

PV reverse polarity protection,
battery reverse polarity protection,insulation monitoring,

Friendly & Flexible

Less noise due to no external cooling fans;
Support Support diesel generator access;

Economical & Practica

More economical to support multiple operating modes;
UPS function

**Electricalcharacteristics**

Model		GI12000P
Project	Specification	Parameter
PV Input	Max PV input power (KW)	15.6
	Max PV Open Circuit Voltage (V)	1000
	MPPT Range@Operating Voltage (VDC)	180~850
	Max. Input Current(A)	12.5
	MPPT Tracker/Strings	2/1
AC Output	Rated Power (kW)	13.2
	Max. Output Current(A)	19.1
	Nominal Voltage/Range(V)	400/360~440, 50 /60 Hz, 3W+N+PE
Battery	Battery Voltage Range(V)	125~600
	Max. Charging Voltage(V)	600
	Charge/Discharge Current(A)	50
	Communication Interface	CAN/RS485
EPS Output	Rated Power (kW)	13.2
	Rated Voltage(V)	400
	Overload Capacity	110%, 30S/120%, 10S/150%, 0.02S
General Data	Ingress Protection	IP65
	Operation Temperature	- 25°C ~ 60°C
	Cooling	Natural
	Dimensions W * D * H (mm)	530*200*600
Display Communication	Display	LCD
	Interface:RS485/Wifi/4G/CAN/DRM	Yes/ Opt/ Opt/ Yes/ Yes
	Safety	IEC/EN62109-1:2010, IEC/EN62109-2:2011
	EMC	IEC/EN 61000-6-1:2019, IEC/EN 61000-6-2:2019, IEC/EN 61000-6-3:2021, IEN/EN 61000-6-4:2019, IEC/EN 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021, IEC/EN 61000-3-11:2019, EN 61000-3-12:2011
	Grid	Europe: EN 50549-1:2019/AC:2019, Germany:VDE-AR-N 4105:2018 /DIN VDE V 0124-100(VDE V 0124-100):2020, South Africa:NRS 097-2-1:2017 Edition 2.1

Features

Support 1C charge and discharge rate
Flexible capacity options, 10.24kWh to 40.96kWh
Easy installation with modular and stacked design
Remote diagnosis and real-time data monitoring



Electrical characteristics

Model	GI48VE			
Number of battery	2	3	4	5
Battery capacity (kWh)	10.24	15.35	20.48	25.6
Usable energy(kWh)	9.22	13.82	18.43	23.04
Rated capacity(Ah)	100			
Rated voltage(V)	51.2			
Voltage range(V)	44.8~57.6			
Max. charge and discharge rate	1C			
Cycle times	80% DOD, cycles>6000, residual capacity>70%			
Communication	RS485/CAN 2.0			
Protection function	Over voltage / Under voltage / Over temperature / Low temperature / Over current / Short circuit			
Dimension (mm)	620*365*406	620*365*545	620*365*648	620*365*823
Weight(kg)	102	149	196	243
Installation	Indoor			
Operating temperature	0°C~50°C			
Optimum working temperature	20°C~30°C			
Storage temperature	-15°C~60°C			
Humidity	5%-95%			
Cooling strategy	Natural			
Enclosure protection rating	IP20			
Altitude(m)	<2000			
Certificate	CE, UN38.3, TUV mark			

Features

Original battery active balance technology
Flexible capacity options, 10.24kWh to 25.6kWh
Easy installation with modular and stacked design
Remote diagnosis and real-time data monitoring



Electrical characteristics

Model	GIHVE			
Number of battery	4	6	8	10
Battery capacity (kWh)	10.24	15.36	20.48	25.6
Usable energy (kWh)	9.2	13.8	18.4	23
Rated voltage(V)	204.8	307.2	409.6	512
Voltage range(V)	179.2-230.4	268.8-345.6	358.4-460.8	448-576
Rated capacity(Ah)	50			
Charge current(A)	25 (Recommended) /50 (MAX)			
Discharge current(A)	25 (Recommended) /50 (MAX)			
Cycle times	80%DOD, cycles>6000, residual capacity>70%			
Communication	RS485/RS232/CAN 2.0			
Protection function	Over voltage / Under voltage / Over temperature / Low temperature / Over current / Short circuit			
Size [Wx DxH, mm]	851*255*618	851*255*878	851*255*1138	851*255*1398
Weight [kg]	136	200	264	328
Installation	Indoor			
Working temperature	-10°C~50°C			
Optimum working temperature	20°C~30°C			
Storage temperature	-30°C~60°C			
Protection degree	IP20			
Humidity	5%-95%			
Altitude	<2000			
Cooling	Natural			
Certificate	CE, UN38.3, MSDS			