



Five-in-One Integrated System

Household Energy Storage & Charge-Discharge Solutions



Address: No.5 Tianyue Ave, Yizheng,
Yangzhou,

Jiangsu, China

Tel/WhatsApp: +86 137 7642 4444

Website: <https://www.zcevit.com>

Five-in-One Integrated System for Lighting, Energy Storage, and Charging

Highly integrated photovoltaic inverters, energy storage converters, energy management systems, DC charging modules for electric vehicles, and energy storage batteries.

Crafted with meticulous design, it embodies minimalist aesthetics. Versatile in application, it meets diverse needs across various scenarios. Intelligent upgrades revolutionize the energy usage experience.



Integrated Design



Extreme Security



Highly Reliable



cut down ones expenditures



Flexible scaling, configure on demand

Modular stacking design for scalable expansion as needed. Flexible adaptation for residential, commercial, and industrial applications.

In industrial and commercial applications, multiple Zhongchi all-in-one printers connected in parallel can meet any capacity requirement.



Supports bidirectional charging and discharging for electric vehicles

Breakthrough V2G functionality

Economically efficient

- Supports dual-channel PV MPPT with a maximum current of 20 A, compatible with high-power PV modules
- Supports DC charging at voltages ranging from 150 to 1000 V, with broad compatibility with electric vehicle models compliant with both Chinese and European/American standards.
- Supports V2G/V2H functionality, providing sufficient emergency backup power or enabling participation in VPP power trading
- Supports OCPP 1.6j&OCPP 2 .Remote control via cloud platform and app for intelligent home energy management



Zhongchi Five-in-One Integrated System for Lighting, Energy Storage, and Charging

High Integration

- Integrated solution featuring photovoltaic inverters, energy storage PCS systems, EV DC charging capabilities, and V2G (Vehicle-to-Grid) discharge functionality
- Can be integrated with high-voltage energy storage batteries for space-saving and cost-effective installation

Economically efficient

Supports dual-channel MPPT for photovoltaic systems, with a maximum current of 20 A compatible with high-power PV modules

Supports DC charging ranging from 150 to 1000 V, with broad compatibility with electric vehicle models compliant with both Chinese and European/American standards.

Supports V2G/V2H functionality, providing sufficient emergency backup power or enabling participation in VPP power trading

Intelligent and Convenient

- Compatible with both grid-connected and off-grid applications, featuring built-in STS with a switching time of <10 ms
- Multiple working modes available, supporting remote OTA updates
- Supports remote control via OCPP 1.6j/OCPP 2.0 cloud platforms and apps, enabling smart home energy management

on the safe side

- Independent air duct cooling design with IP65 high protection rating
- Integrated surge protection, high-frequency isolation, island mode protection, and reverse current prevention for enhanced home-wide electrical safety

Residential Energy Storage with EV Charging Solution



Highly integrated

- Integrated PV inverter + PCS+ EV Charger + EMS to maximize the use of green energy
- Simplify design, easy to integrate



Economical and efficient

- Support on-grid and off-grid operation, switch over time <10ms
- Integrated EV charging to save investment cost
- V2G/V2H power transfer, ample backup energy



Smart and convenient

- Support a variety of working modes to choose
- Intelligent energy management system for home

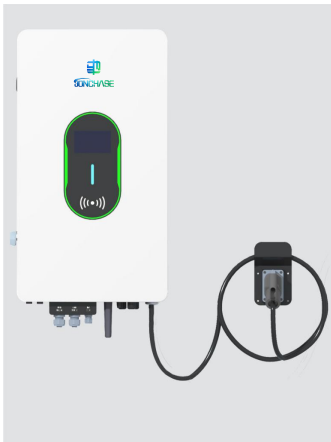


Safe and reliable

- Independent air duct cooling, IP66 high protection level
- Integrated SPD, EV charging with isolation



7kW Single-Phase Hybrid Converter with V2G



Intelligent

- Support on-grid and off-grid operation , switch over time <10ms
- Support a variety of working modes to choose
- Intelligent energy management system for home



Economic & High-efficient

- Support 2PV access, compatible with high-power modules
- Integrated 7kw 150~1000VDC charging and discharging , wide EV compatibility
- V2G/V2H power transfer, ample backup energy



Safe & Reliable

- IP66 protection level
- Integrated SPD , EV charging with isolation

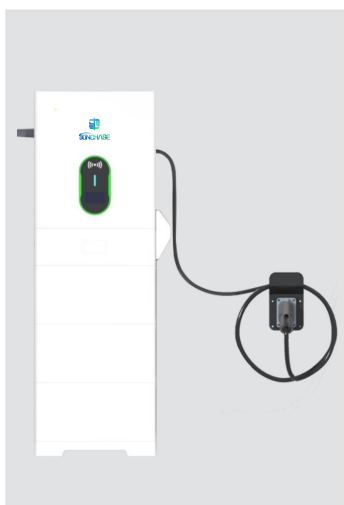


Advanced

- Integrated Inverter+PCS+EVDC Charger+V2G+EMS to maximize use of green energy

Product Model	
EV Charge	Rated power (W)
	7kW
	DC side voltage range (V)
	Rectification mode: 150VDC~1000VDC (150VDC~300VDC constant current 23.3A) Inverter mode: 300VDC~1000VDC
	DC side current range (A)
AC input & output	0~23.5 (charge); 0~25(discharge)
	Voltage regulation accuracy
	≤ ±0.5%
	Current regulation accuracy
	≤ ±1%
EPS output	Charging connector specifications
	CCS1/CCS2/GBT single gun(5m cable)
	AC output
	Single-phase two-wire + PE(L/N/PE)
	Nominal voltage/range (V)
Battery	230VAC(187~275VAC)
	Max. output current (A)
	40A
	Rated power (VA)
	7000
PV side parameters	Frequency (Hz)
	50(±5)/60 (±5)
	Power factor
	≥ 0.98(50%~100% output power)
	THDi
Others	≤ 5%(50%~100% output power)
	Rated voltage (V)
	230VAC
	Rated frequency (Hz)
	50Hz/60HZ
Battery	Rated power (kW)
	5kVA
	Rated current (A)
	21.7A
	THDi
PV side parameters	< 3%
	Automatic switching time (ms)
	< 10ms
	Battery voltage range (V)
	360VDC~450VDC
Battery	Max. charge/discharge current (A)
	1 ways(13.89A)
	Charge/discharge power
	1 ways(1000W)
	Battery type
PV side parameters	LiFePO4(LFP)
	Communication interface
	CAN 2.0 / RS485
	Max. input power (kW)
	10.5kW
Others	Max. PV voltage (V)
	550V
	Start-up voltage (V)
	120V
	Nominal voltage(V)
Battery	360V
	MPPT voltage range (V)
	90V~550V
	MPPT tracker/strings
	2
PV side parameters	Max. input current (A)
	15.0A
	Max. short circuit current (A)
	20.0A
	Dimensions (H*W*D mm)
Battery	806*445*217mm(without hanging board)
	Weight (kg)
	54kg
	Max. efficiency (%)
	≥ 95%(rectifier mode/inverter mode)
Others	Noise
	< 55(rated working condition)
	Display
	LCD/LED
	BMS
PV side parameters	CAN 2.0
	Meter
	RS485
	Monitoring interfaces
	WIFI/Bluetooth/DRM/LAN (optional)/4G (optional)
Protection	EV Charging Interface
	APP / LCD / RFID(Optional)
	PV ground fault detection, EV insulation fault detection,leakage current detection,islanding protection, DC(PV/battery) reverse connection protection, PV side/AC side,lightning protection ,islanding
	Certification and Standards
	Safety regulations ENIEC61851-21,IEC/EN62109,EN62477 EMC EN IEC61000-6-1/2/3/4 Grid connected VDE4105 VDE 0124/EN50549/AS4777.2

7kW Stacked Hybrid ESS with V2G

**Intelligent**

- On & off-grid compatibility, switch over time <10ms
- Support a variety of working modes to choose
- Intelligent energy management system for home

**Economic & High-efficient**

- Support 2 PV access, compatible with high-power modules
- Integrated 150~1000VDC charging, wide EV compatibility
- V2G/V2H power transfer, ample backup energy

**Safe & Reliable**

- IP66 protection level, Maintenance-free
- Integrated surge protection, high-frequency isolation, safer power consumption
- Compatible with anti-backflow function

**Advanced**

- Integrated Inverter+PCS+EVDC Charger+V2G+EMS to maximize use of green energy
- Supports stacking installation with energy storage batteries, saving space and installation costs

Product Model**ZC-CCS2BD****EV Charge**

Rated power(W)	7kW
DC side voltage range(V)	Rectification mode:150VDC~1000VDC(150VDC~300VDC constant current 23.3A) Inverter mode:300VDC~1000VDC
DC side current range(A)	0~23.5(charge);0~25(discharge)
Voltage regulation accuracy	≤±0.5%
Current regulation accuracy	≤±1%
Charging connector specifications	CCS1/CCS2/GBT,single gun(3m cable)
AC output	Single-phase two-wire+PE(L/N/PE)
Nominal voltage/range(V)	230VAC(187~275VAC)
Max.output current(A)	40A
Rated power (VA)	7000
Frequency(Hz)	50(±5)/60(±5)
Power factor	≥0.98(50%~100%output power)
THDi	≤5%(50%~100%output power)
Rated voltage(V)	230VAC
Rated frequency(Hz)	50Hz/60HZ
Rated power (kW)	5kVA
Rated current(A)	21.7A

AC input & output**EPS output**

THDi	<3%
Automatic switching time (ms)	<10ms(The system integrates and off grid switching function,without the need to configure STS separately)
Battery voltage range(V)	360VDC~450VDC
Max.charge/discharge current(A)	1ways(13.89A)
Charge/discharge power	1 ways(5000W)

Battery

Battery type	LiFePO4 (LFP)
Communication interface	CAN 2.0/RS485
Charging station capacity	5kWh
Max.input power (kW)	10.5kW
Max.PV voltage (V)	550V
Start-up voltage(V)	120V
Nomina voltagel (V)	360V
MPPT voltage range(V)	90~500VDC
MPPTtracker/strings	2
Max.input current(A)	15.0A
Max.short circuit current(A)	20.0A

PV side parameters

Dimensions(H*W*Dmm)	7kW(without batt)740*655*221mm;7kW/5kWh 1340*655*221mm 7kW/10kWh 1655*655*221mm
Weight(kg)	65kg(excluding battery)

Others

Max.efficiency(%)	≥94%
Noise	<55(rated working condition)
Display	LCD/LED
BMS	CAN 2.0
Monitoring interfaces	WIFI/Bluetooth/DRM/LAN(optional)/4G(optional)

Protection**Certification and Standards**

Safety regulations ENIEC6185 0124/EN50549	1-21,IEC/EN62109,EN62477 EMC EN IEC61000-6-1/2/3/4,Grid connected VDE 4105VDE
--	---

PVground fault detection,EVinsulation fault detection,leakage current detection,islanding protection,
DC(PV/battery)reverse connection protection,PV side/AC side,lightning protection,islanding

Technical Support

Adhering to the "Customer-Centric" Service Philosophy

ZC Power is committed to a customer-first approach, drawing on years of product solution expertise and industry experience. Through continuous innovation, we have developed a robust service ecosystem designed to deliver comprehensive, professional support to our clients.

Service Advantages



Expert Team



Timely Response



Reliable Delivery



Standardized Processes



Professional Pre-Sales Consultation

With decades of industry expertise, ZCPower's highly skilled R&D team and technical specialists rapidly identify and assess client requirements, providing optimal, customized, and cost-efficient solutions.



Comprehensive After-Sales Service

ZC Power focuses on enhancing customer satisfaction through a premium quality assurance and maintenance framework. Our system includes a structured organizational model, a talented workforce, and meticulous service procedures, ensuring swift responses and professional, prompt, and thorough post-sales support.