

# GLOBAL CERTIFICATION

Each product can only reach users after undergoing rigorous "physical examination" such as safety testing/reliability testing/application testing.



**SHENZHEN CTECHI TECHNOLOGY CO., LTD.**

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# 2C

ONE-STOP ENERGY STORAGE SOLUTIONS

Residential Energy Storage  
Commercial and Industrial Energy Storage

“ THERE IS SUNNY,  
THERE IS POWER ”



# COMPANY PROFILE

SHENZHEN CTECHI TECHNOLOGY CO., LTD.

# OUR STORY

Shenzhen CTECHi Technology Co., Ltd. is an energy storage expert with 20 years' experience in battery industry. We offer one-stop battery solutions as well as ODM, OEM, and SKD services, focusing on the R&D and manufacturing of a wide range of batteries, including energy storage systems, motive power batteries and digital & consumer batteries.

We have accumulated rich experiences on the energy storage solution through more than 30,000 customized cases, which enables us to provide tailored solutions and prompt responses to our clients' diverse needs. Whether you require small-quantity orders or full-service packages that includes shipping, certification and freight, we are committed to meeting your specific requirements.

With state-of-the-art facilities covering an area of 100,000+ square meters in Guangdong and Hunan provinces, CTECHi is committed to rigorous product production, strict quality control, precise testing and recognized international certification to ensure the high quality of products.

Thanks to our dedicated professional team, CTECHi has earned a solid reputation for innovation and reliability. We are committed to growing together with our customers by providing them with products and marketing strategies that meet their target markets, thereby supporting our customers expanding more market share, which is also in line with CTECHi's philosophy: Growth! Happiness! Respectable!

2



Manufacture Sites

1500+



Employees

300



Senior Researchers

100000 m<sup>2</sup>



Production Base

Ctechi Technology International Limited

2005

2016

2017

2018

2019

2020

2021

2022

5kw Home Energy Storage Battery

Home Storage Management Platform

Europe Office

Breakthrough Of 80kwh In Home Storage System Technology

Europe Office

Cabinet Type Home Storage System, Realizing Integration Of Battery And Inverter

Hunan Ctechi Industrial Park

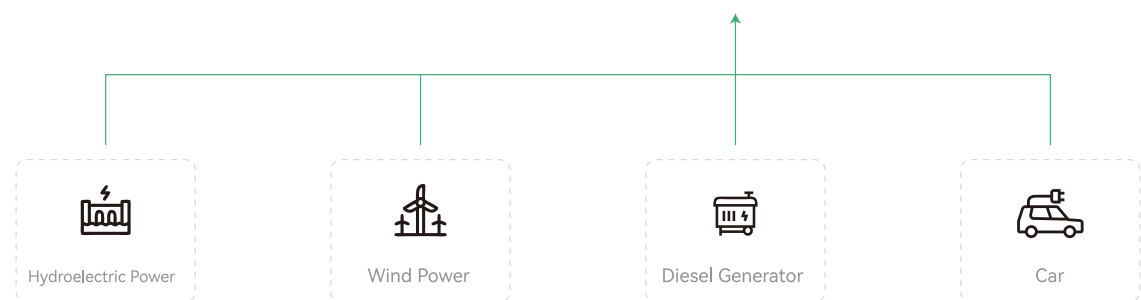
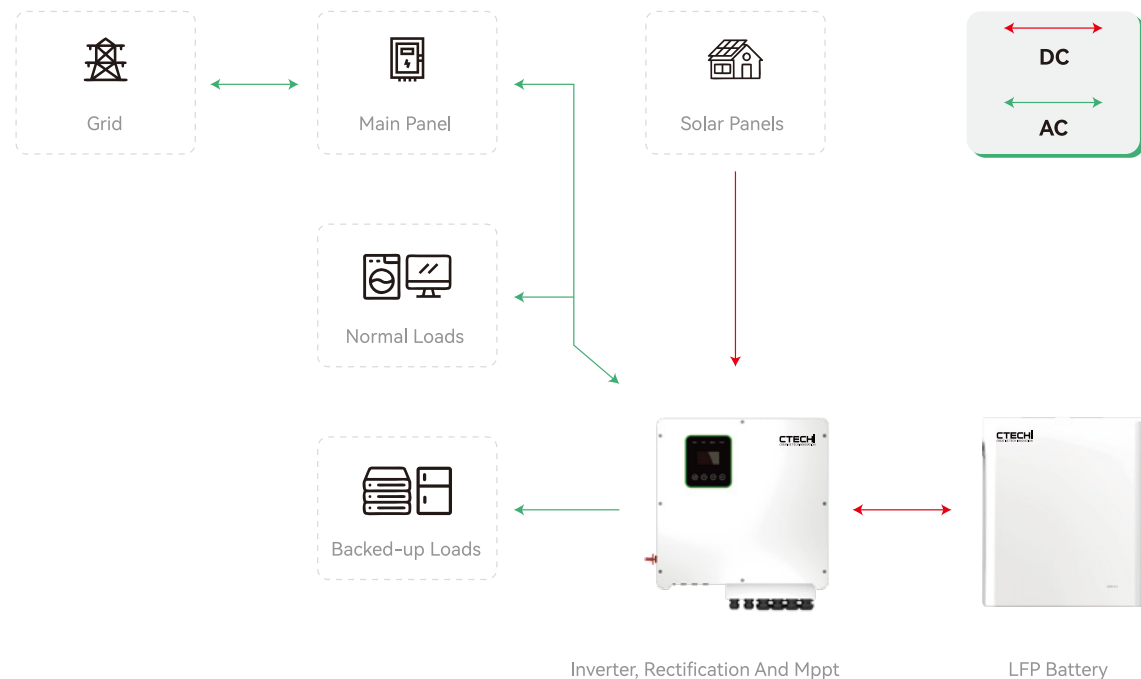
Stacked Home Storage System

Industry Standard Development

Wall Mounted, Cabinet, Stacked, Mobile Compatible Energy Storage Battery

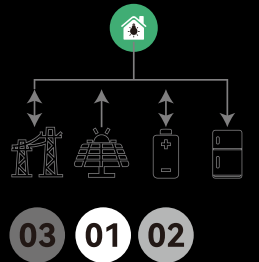
# RESIDENTIAL ENERGY STORAGE SYSTEM SOLUTION

## HYBRID SYSTEM



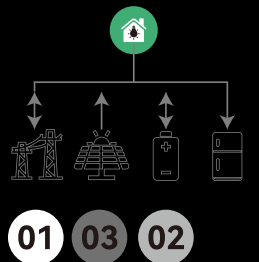
## SOLAR PRIORITY MODE

In the solar priority mode, all power supply to the load is provided by solar energy. when the electricity generated by solar energy is enough to meet the user's load, solar energy supplies power to the load, and excess solar energy charges the battery pack. When the electricity generated by solar energy is not enough to meet the user's load, the battery pack will supply the power to the load. If the the battery level is less than 10%, the system will automatically switch to grid power to supply the load, and will activate grid power to charge the battery. At the same time, solar power will charge the battery until it is fully charged. After it is fully charged, the system will automatically switch to solar power and battery power to



## AC PRIORITY MODE

In AC (grid) priority mode, the power supply to the load is provided by the grid bypass input. when the battery is fully charged, AC(grid) only supply power to the user's load, When the battery level is severely low, AC (grid) not only supplies power to the user's load, but also starts to charge the battery, while solar energy charges the battery until it is fully charged. When AC (grid) power is cut off, the system will automatically switch to solar energy to supply power to the load.



## SE PRIORITY MODE (STAGGER OF POWER CONSUMPTION)

In SE mode, users can set the SE time, during SE time, the power supply of the load is provided by the grid bypass input, while the grid charges the battery and the solar energy charges the battery until it is fully charged. Outside of SE time, the load is powered by solar energy. When the electricity generated by solar energy is not enough to meet the user's load, the battery pack supplies the power to the load. When the battery level is less than 10%, the system will automatically switch to grid power to supply the load, and will activate grid power to charge the battery. At the same time, solar power will charge the battery until it is fully charged. After it is fully charged, the system will automatically switch to solar power and battery power to supply the load.



- Integrated design with flexible and variable module layout; small footprint, high energy density, easy maintenance.
- Uses (LiFePO4) modules, safe and reliable, with independent fire protection and fault warning management systems.
- Equipped with separate liquid cooling and external exhaust systems for good cabinet temperature control.
- Supports remote monitoring, data transmission, cloud platform management, and multi-level user permissions.

PROJECT	SYSTEM PARAMETERS
Product Model	ES-320100
Battery Parameters	
Cell Type	LFP-100Ah
Battery Capacity	6.4KWH*N
Battery Voltage Range	(50~73V)*N
AC Grid Parameters	
Grid Type	Three-phase inverter
Rated Power	5~10KW
Rated Grid Voltage	380vAC
Grid Frequency	50Hz/60Hz
General Parameters	
Dimensions (L*D*H)	482*133*551mm
Communication Method	CAN/RS485/
Weight	50kg
Protection Level	IP54(battery pack)
Operating Temperature	-20~65°C
Humidity Range	0~95%(non-condensing)
Operating Altitude	<2000m
Noise	57.5dB
Cooling Method	Natural cooling
Corrosion Protection Level	C3

# HIGH VOLTAGE RESIDENTIAL ENERGY STORAGE





# RACK BATTERIES SERIES

- LARGE CAPACITY UP TO 80KWH
- FULL-INTEGRATED LIFePO4 BATTERY SYSTEM
- UNIQUE THERMAL MANAGEMENT
- SUPPORTS IP53 PROTECTION CUSTOMIZED



## ITEMS

## SPECIFICATIONS

Energy:	2.56KWH	5.12KWH	7.68KWH	10.24KWH
Nominal Voltage:	51.2V	51.2V	51.2V	51.2V
Nominal Capacity:	50Ah	100Ah	150Ah	200Ah
Working Voltage Range:	40-57.6V	40-57.6V	40-57.6V	40-57.6V
Max. Chaging Current:	100A	100A	100A/150A	100A/200A
Max. Discharging Current:	100A	100A	100A/150A	100A/200A
Size (mm):	3U	3U/4U	3U/4U	5U
Depth:	380mm	380mm	680mm	540mm
Weight (kg):	24	45	68	96
Series:	16S	16S	16S	16S





# STACKED BATTERIES SERIES

- LARGE CAPACITY UP TO 80KWH
- FULL-INTEGRATED LiFePO4 BATTERY SYSTEM
- UNIQUE THERMAL MANAGEMENT
- SUPPORTS IP53 PROTECTION CUSTOMIZED



## ITEMS

Model No

Voltage

Capacity

Energy

Dimensions (LxWxH)

Weight

Life Times (25°C)

Life cycles (80% DoD, 25°C)

Storage Time / Temperature

Operation Temperature

Storage Temperature

Enclosure Protection Rating

Operation Voltage

Max.charging Voltage

Max.charging and Discharging Current

Max.Power

## SPECIFICATIONS

CT-5KWh

51.2V

100Ah

5.12kwh

649.7x450x133mm

50kg

20 Years

5000 Cycles

5 months @25°C; 3 months @35°C; 1 month @45°C

-20°C to 60°C @60+/-25% Relative Humidity

0°C to 45°C @60+/-25% Relative Humidity

IP31

40-57.6Vdc

58Vdc

100A

5120W





# WALL MOUNTED SERIES

- LARGE CAPACITY UP TO 80KWH
- ON-GRID OR OFF-GRID
- UNIQUE THERMAL MANAGEMENT
- SUPPORTS IP53 PROTECTION CUSTOMIZED

## ITEMS

## SPECIFICATIONS

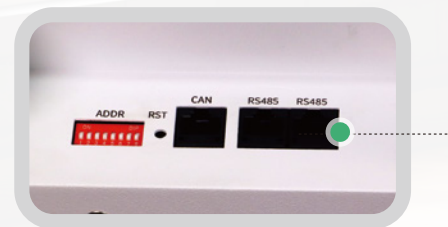
Model No	2.4KWH	5KWH	10KWH	WLPK15K
Voltage	48V	51.2V	51.2V	51.2V
Capacity	50Ah	100Ah	200Ah	280Ah
Energy	2.4KWH	5.12KWH	10.24KWH	14.33KWH
Dimensions (LxWxH)	L340*W450*H150mm	649.7x450x133mm	L470*W840*H150mm	L840*W430*H230mm
Weight	24Kg	50kg	80Kg	115Kg
Life Cycles	5000 Cycles	5000 Cycles	5000 Cycles	6000 Cycles
Enclosure Protection Rating	IP53	IP53	IP53	IP53
Operation Voltage	37.5-54Vdc	40-57.6Vdc	40-57.6Vdc	40-57.6Vdc
Max.charging Voltage	56Vdc	58Vdc	58Vdc	58Vdc
Max.charging and Discharging Current	50A	100A	100A	200A

Storage Time / Temperature 5 months @25°C; 3 months @35°C; 1 month @45°C  
 Operation Temperature -20°C to 60°C @60+/-25% Relative Humidity  
 Storage Temperature 0°C to 45°C @60+/-25% Relative Humidity



● UP TO 16 PARALLEL

● SUPPORT FOR CAN/R485 COMMUNICATION, ETC





# ALL IN ONE WALL MOUNTED SERIES

- LARGE CAPACITY UP TO 80KWH
- FULL-INTEGRATED LifePO4 BATTERY SYSTEM
- UNIQUE THERMAL MANAGEMENT
- SUPPORTS IP53 PROTECTION CUSTOMIZED

## ITEMS

Model No:

AC Output Rated Power:

AC Output Peak Power:

PV Max Input power:

Battery Voltage:

Battery Capacity:

Battery Energy:

Battery Working Voltage:

Protection Rating:

Life Cycles:

Dimension:

Weight:

## SPECIFICATIONS

WT5KWL1-PK5.12K

5KW

10KW

5.5KW

51.2V

100Ah

5.12KWH

40-57.6Vdc

IP53

6000 Cycles

1199\*515\*150mm

65Kg

WT5KWL1-PK10.24K

5KW

10KW

5.5KW

51.2V

200Ah

10.24KWH

40-57.6Vdc

IP53

6000 Cycles

1390\*515\*150mm

105Kg



SUPPORT FOR CAN/R485  
COMMUNICATION, ETC







# ALL IN ONE

## HOME ENERGY STORAGE SYSTEM

- LARGE CAPACITY UP TO 80KWH
- ON-GRID OR OFF-GRID
- UNIQUE THERMAL MANAGEMENT
- SUPPORTS IP54 PROTECTION CUSTOMIZED

### ITEMS

Energy Storage Battery Rated Capacity	16kwh
Single Cell	314ah
Rated Output Power	8kw
Rated Output Voltage	230vac Single Phase
Output Waveform	Pure Sine Wave
Rated Frequency	50hz/60hz
Mpvt Number	2-Way
Photovoltaic Maximum Input Power	5500w+5500W
Photovoltaic Maximum Input Current	22a+22a
Photovoltaic Maximum Open Circuit Voltage	500cdc+500cdc
Mpvt Operating Voltage	125~425vdc
Mains Input Voltage Range	90~275vac
Mains Input Frequency Range	50hz/60hz
Mains Bypass Overload Current	63a
Battery Inverter Efficiency	92%
Wi-Fi/Gprs	Optional

### SPECIFICATIONS

### PCS

Size (Height*Width*Thickness)	1070*680*250 mm
Weight	About 130kg
Thermal Management	Natural Cooling
Protection Level	IP54

### SPECIFICATIONS

Size (Height*Width*Thickness)	1070*680*250 mm
Weight	About 130kg
Thermal Management	Natural Cooling
Protection Level	IP54



# STACKING SERIES

## RESIDENTIAL ENERGY STORAGE SYSTEM

Standard cabinets, automatically based on internal intelligent programs.  
Modular design, flexible for maintenance, installation and capacity extension.

○ LARGE CAPACITY UP TO 160KWH

○ UNIQUE THERMAL MANAGEMENT



BATTERY MODULE ARRAY

	SLPK14.4K	SLPK19.2K	SLPK24K	SLPK28.8K	SLPK33.6K	SLPK38.4K
Battery Moudle	3	4	5	6	7	8
Battery system capacity	14.4KWH	19.2KWH	24KWH	28.8KWH	33.6KWH	38.4KWH
Battery Chemitry	LFP					
Size(W/D/H)	442*520*650	442*520*820	442*520*998	442*520*1176	442*520*1354	442*520*1532
Weight	135KG	179KG	223KG	267KG	311KG	355KG
Single moudle DC Voltage	42-54V					
Warranty	10Years					
Operating temperature range	Discharge:-20~60°C, Charge:0~45°C					
Deep of discharge	95%					
Cycle life	6000 Cycles					
Max charging/discharging current	75A(0.5C)	100A(0.5C)	125A(0.5C)	150A(0.5C)	175A(0.5C)	200A(0.5C)

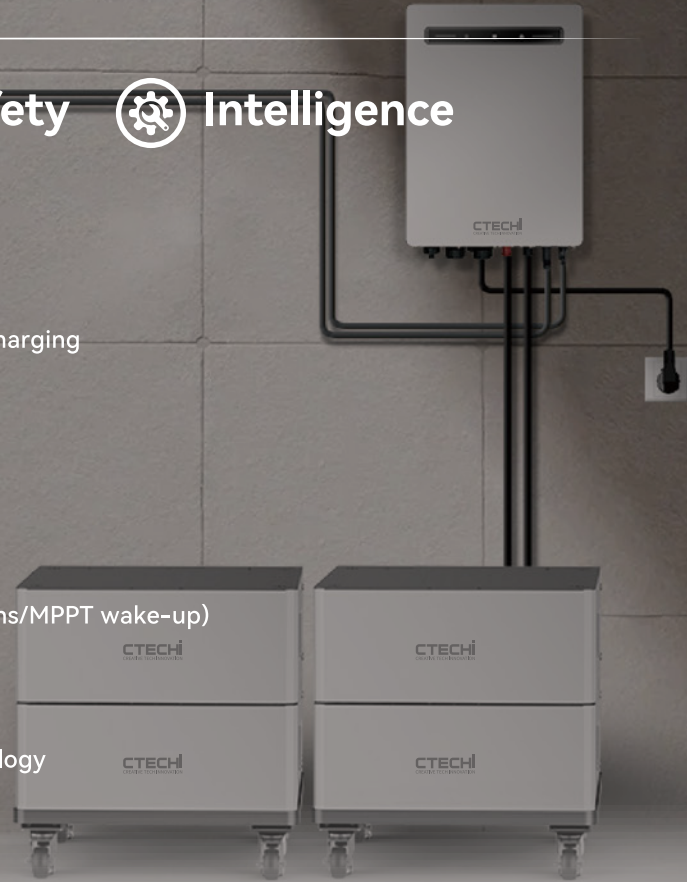




# BALCONY STORAGE SYSTEM

 **Efficient**  **Safety**  **Intelligence**

- ▶ Super fast charging
- ▶ Efficient MPPT
- ▶ High efficiency of charging and discharging
- ▶ IP65 high protection design
- ▶ On-grid/Phase separation
- ▶ Smart operation of mobile APP
- ▶ Charging mode output protection
- ▶ Battery undervoltage wake-up (Mains/MPPT wake-up)
- ▶ Excellent load adaptability
- ▶ Adopting DSP digital control technology



TEMS	SPECIFICATIONS
Model	SLPK5120
Nominal Capacity	5120Wh
Nominal Voltage	51.2V
Working Voltage Range	43.2-57.6V
Standard Charging&discharging Current	20A(0.2C)
Max.Charging&discharging Current	100A
Battery Type	LiFePO4
Standard Discharge Temperature	-20~60°C
Dimension(WXDXH)	482x440x142.4mm
Weight	42kg
Warranty	5years

Balcony Storage Inverter		
Rated power	1600VA/1600W	
Peak power(W)	3200	
Machine architecture	Bidirectional AC/DC inverter Boosting and lowering pressure MPPT	
Input/output phase number	Single phase input/Single phase output	
Output	Number of output lines	Single phase two wire ( L, N ) + Protective ground wire
	Rated voltage (VAC)	220/230/240 50/60Hz ±0.1%(Settable, automatically detects mains frequency)
Mains input	Number of input lines	Single phase two wire ( L, N )+Protective ground wire
	Input voltage range(Vac)	Zero fire phase voltage: 184~253
	Input frequency range(Hz)	48-51
Battery and charging	Input power factor	≥0.95
	Rated voltage of battery (V)	48
	Battery type	LiFePO4 16 strings, Ternary lithium14 strings
	Charging termination voltage (V)	56.8V/Continuing Adjust
Solar charging	Discharge termination voltage (V)	44V/Continuing Adjust
	Charging current(A)	Max.25A, digitally adjustable, default 10A
	Max. PV input power(W)	800W*2
	Max. PV open circuit voltage(VDC)	100
Solar charging	PV operating voltage range(VDC)	10~100
	PV input current(A)	PV access MPPT working mode,16A max.
Solar charging	Number of MPPT	2
	PV charging current(A)	0-16A*2
On-grid	Optional function	On-grid power can be set to 0-1600W
Interface	APP	The mobile APP manages and controls the on-grid time and power
	Communication interface	Switch on and off command interface,RS485,CAN
	LCD display screen(Options)	Display input and output voltage, frequency, load percentage, PV voltage and current, operating mode, and machine status
Environmental parameters	Operating temperature range	-20~55°C
	Operating humidity range	0-98% (No condensation)
	Cooling method	natural cooling
	Protection degree	IP65
Structural Shape	Size(MM)	360 × 256× 130
	Weight(kg)	7.5
Safety and electromagnetic compatibility standards	IEC/EN62109-1,IEC/EN62109-2/IEC/EN61000-6-1/-2/-3/-4, IEC/EN61000-3-2/-3/VDE4105	

# ALL-IN-ONE BACKUP POWER STATION

● POWER YOUR HOME FOR DAYS

● POWER PRETTY MUCH ANYTHING

## ITEMS

## SPECIFICATIONS

Battery Type	LiFePO4
Battery	4992Wh (48V 104Ah 1560000mAh)
Cycle Life	3500 Cycles
USB-C Output	5V/3A, 9V/2A, 12V/1.5A, 30W Max.
USB-A Output	2*5V/2.4A 12W Max.
AC Output	100V~120V/50Hz 60Hz 3600W Peak Power: 5000W 220V~240V/50Hz 60Hz 3600W Peak Power: 5000W
Input	3000W Max (Charger 2000 Max) Car Cigar Port/Solar Panel 12-100V 20A Max. 1000W (XT60)
Weight	66kg
Size	445x 278 x 622mm,
Charging Temperature	0°C~40°C
Discharge Temperature	-10~ 40°C
CIG Output	1*12V/10A 120W Max.





# SINGLE-PHASE ESS HYBRID INVERTER

- Supports automatic battery switching;
- Support diesel generator input source;
- Compatible with lead-acid and lithium-ion batteries;
- Parallel available, intelligent BMS management;
- Input power source priority can be set by users;
- Battery reverse connection protection, anti-power control function;



• WH3KL1 • WH5KL1 • WH6KL1

# THREE PHASE ESS HYBRID INVERTER



• WH8KL3 • WH10KL3 • WH12KL3

- Compatible with lead-acid and lithium-ion batteries;
- Support diesel generator input source;
- IP65 protection, low noise < 35dB;
- Battery reverse connection protection, anti-power control function
- Input power source priority can be set by users;
- Support full power discharge, automatic management of battery charge and discharge;

## Residential Energy Storage Inverters

Technical specification	WH3KL1	WH5KL1	WH6KL1	WH8KL3	WH10KL3	WH12KL3
Input (PV)						
Max.power(KW)	4.6	7	7	10.4	13	15.6
Max. DC voltage(V)		550			1,000	
MPPT voltage range(V)		125~500			180~850	
Max.input current of single MPPT(A)		14			12.5	
MPPT tracker/strings		2/1		2/1	2/1	2/1
AC output						
Rated output power(kVA)	3	5	6	8.8	11	13.2
Max. output current(A)	13	21.7	26	12.7	15.9	19.1
Grid voltage/range(V)		230/176~270			400/360~440	
Frequency (Hz)		50 /60			50 /60	
Power factor		0.8lagging-0.8leading			0.8lagging-0.8leading	
THDi		<3%			<3%	
AC output topology		L+N+PE			3W+N+PE	
Battery						
Battery voltage range(V)		40~58			125~600	
Max. charging voltage(V)		58			600	
Full battery voltage(V)	95/62.2	95/104.2	95/110	210	270	250
Max. charge/discharge current(A)				40	40	50
Battery type		lithium /Lead-acid			lithium /Lead-acid	
Communication Interface		CAN/RS485			CAN/RS485	
EPS output						
Rated power(kVA)	3	5	6	8.8	11	13.2
Rated output voltage(V)		230			400	
Max. output current(A)	13	21.7	26	12.7	15.9	19.1
Rated frequency(Hz)		50 /60			50 /60	
Automatic switching time(ms)		<20			<20	
THDu		<2%			<2%	
Overload capacity		110%, 30S/120%, 10S/150%, 0.02S			110%, 30S/120%, 10S/150%, 0.02S	
General data						
Battery charge /discharge efficiency		95.0%			96.6%	96.7%
DC Max. efficiency		97.6%			97.9%	98.2%
Europe efficienc		97.0%			97.2%	97.5%
MPPT efficiency		99.9%			99.5%	99.5%
Ingress protection		IP65			IP65	
Noise emission(dB)		<35			<35	
Operation temperature		-25°C~ 60°C			-25°C~ 60°C	
Cooling		Natural			Natural	
Relative Humidity		0 ~95% (non-condensing)			0 ~95% (non-condensing)	
Altitude		2,000m(>2,000 Derating)			2,000m (>2,000 Derating)	
Dimensions W * D * H (mm)		550*200*515			530*200*600	
Weight(kg)		25			29	
Isolation transformer		No			No	
Self-consumption(W)		<3			<3	
Display and communication						
Display		LCD			LCD	
Interface:RS485/Wifi/4G/CAN/DRM		Yes/ Opt/ Opt/ Yes/ Yes			Yes/ Opt/ Opt/ Yes/ Yes	
Safety standard		IEC/EN62109-1/-2, IEC/EN62477-1			IEC/EN62109-1/-2, IEC/EN62477-1	
EMC		IEC/EN 61000-6-1, IEC/EN 61000-6-3			IEC/EN 61000-6-1, IEC/EN 61000-6-3	
On-grid		South Africa NRS097-2-1:2017, UK G98,G99			Europe: EN50549-1, Germany: VDE4105/0124, UK: G99, South Africa: NRS097-2-1:2017	





## SERIES HIGH FREQUENCY INVERTER

- 450V high PV input
- Optional WIFI function
- Pure sine wave output, adaptable to different loads
- Higher solar charging efficiency and battery protection
- Working with or without battery
- Output power factor PF=1
- Parallel function to expansion power
- High frequency inverter, lighter weight with higher efficiency
- lithium battery activation start function with ac and solar mode

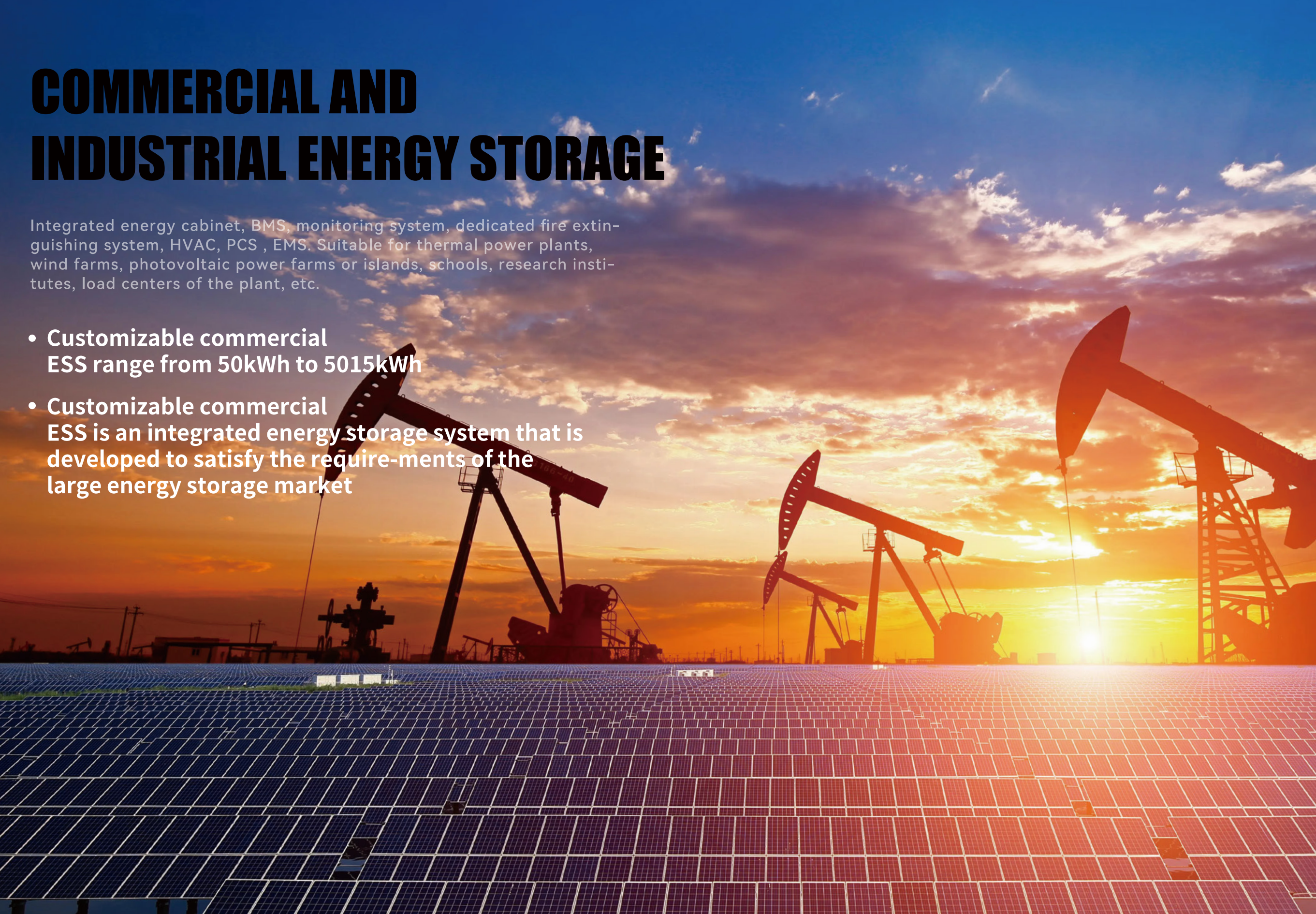
Series High Frequency Inverter Data Sheet				
Input	Phase	L+N+PE		
	Nominal Voltage	208/220/230/240VAC		
	Voltage Range	154~264VAC±3V (Normal Mode) 185~264VAC±3V (UPS)		
	Frequency Range	50Hz/60Hz(Adaptive)		
Output	Rated Power	3000W	5000W	10000W
	Output Voltage(AC)	208/220/230/240VAC±5%		
	Output Frequency	50/60Hz±0.1%		
	Waveform	Pure sine wave		
	Transfer Time( Optional)	10ms for computer , 20ms for home appliances		
	Peak power	6000VA	10000VA	20000VA
	Overload	Battery Mode: 1min@102%~110% Load 10s@110%~130% Load 3s@130%~150% Load 200ms@>150% Load		
	Peak efficiency (battery mode)	>94%	>94%	>94%
Battery	Rated voltage	24Vdc	48Vdc	48Vdc
	Constant voltage charging voltage	28.2Vdc	56.4Vdc	56.4Vdc
	Floating charge voltage (Optional)	27Vdc	54Vdc	54Vdc
charger	PV charging method	MPPT	MPPT	Double MPPT
	PV max input power	3500W	5500W	5500W*2PCS
	MPPT tracking range	120~430Vdc	120~430Vdc	120~450Vdc
	Max PV input voltage	450Vdc	450Vdc	450Vdc
	Max PV charging current	60A	120A	80A+80A
	Max AC charging current	60A	120A	80A+80A
	Max charging current	120A	120A	80A+80A
Display	LCD display	Operating mode/load/input/output, etc.		
Communication port	RS232	5PIN/Pitch2.0mm, baud rate 2400		
	Expansion & configuration port	2×5PIN/Pitch2.54mm, lithium battery BMS communication card, WIFI card, dry contact card, etc.		
	Parallel interface	No	Optional	No
Environmental parameters	Operating environment temperature	0~40°C		
	Operating environment humidity	20%~95% (Non condensing)		
	Storage temperature	-15~60°C		
	Altitude	The altitude should not exceed 1000m, derating above 1000m, up to 4000m, refer to IEC62040		
	noise	≤50db		
Certifications	EN-IEC 60335-1, EN-IEC 60335-2-29, IEC 62109-1			



# COMMERCIAL AND INDUSTRIAL ENERGY STORAGE

Integrated energy cabinet, BMS, monitoring system, dedicated fire extinguishing system, HVAC, PCS, EMS. Suitable for thermal power plants, wind farms, photovoltaic power farms or islands, schools, research institutes, load centers of the plant, etc.

- Customizable commercial ESS range from 50kWh to 5015kWh
- Customizable commercial ESS is an integrated energy storage system that is developed to satisfy the requirements of the large energy storage market





- Integrated design with flexible and variable module layout; small footprint, high energy density, easy maintenance.
- Uses lithium iron phosphate (LiFePO4) power cells, with independent fire protection and fault warning management systems, ensuring safety and reliability.
- Supports user terminal monitoring to understand system operation.

PROJECT	SYSTEM PARAMETERS
Battery Cell	LFP,3.2V/100AH
Battery box	1P48S-153.6V100AH,15.36KWH
Battery box quantity	4pcs
System rated power	61.44kwh
System rated voltage	614.4v
System voltage range	520v~700v(2.7v~3.65v)
Charge and discharge rate	≤ 0.5C
Discharge Depth	95%
Communication interface	RS485/CAN
Cooling method	Intelligent air cooling
Fire protection system	Aerosol Adhesive
PCS	
Rated power	30KW
AC current harmonics	<5% (rated power)
DC component	<0.5%
Rated grid voltage	230V/400V
Grid voltage range	-20%~15 %
Rated grid frequency	50/60Hz
Maximum efficiency	97.8%
Wiring method	Three-phase four-wire
Communication interface	RS485/CAN
Grid-connected switching	Supports on-grid and off-grid switching , with built-in STS (switching time <5mS)
MPPT	
Rated power	19.2KW+19.2KW
PV side voltage	250~700V
Maximum efficiency	>99%
SYSTEM	
Installation Location	Outdoor installation ( it is recommended to build a canopy )
Protection level	IP55
Corrosion resistance	none
Operating humidity range	5~95% (no condensation)
Operating temperature range	-20~60 °C
Maximum operating altitude	3000m (>2000m derating)
Dimensions (length*width*height)	860*1025*1500
weight	About 750KG

# STANDARD ENERGY STORAGE CABINET





- Integrated design with flexible and variable module layout; small footprint, high energy density, easy maintenance.
- Uses lithium iron phosphate (LiFePO4) power cells, with independent fire protection and fault warning management systems, ensuring safety and reliability.
- Supports user terminal monitoring to understand system operation.

PROJECT	SYSTEM PARAMETERS
Battery Cell	LFP,3.2V/314AH
Battery box	1P36S-115.2V/,36.17KWH
Battery box quantity	3pcs
System rated power	108.52kwh
System rated voltage	345.6v
System voltage range	291.6v~394.2v(2.7v~3.65v)
Charge and discharge rate	≤ 0.5C
Discharge Depth	95%
Communication interface	RS485/CAN
Cooling method	Intelligent air cooling
Fire protection system	Aerosol Adhesive
PCS	
Rated power	50KW
AC current harmonics	<5% (rated power)
DC component	<0.5%
Rated grid voltage	230V/400V
Grid voltage range	-20%~15 %
Rated grid frequency	50/60Hz
Maximum efficiency	97.8%
Wiring method	Three-phase four-wire
Communication interface	RS485/CAN
Grid-connected switching	Supports on-grid and off-grid switching , with built-in STS (switching time <5mS)
MPPT	
Rated power	38.4KW+38.4KW
PV side voltage	250~700V
Maximum efficiency	>99%
SYSTEM	
Installation Location	Outdoor installation ( it is recommended to build a canopy )
Protection level	IP55
Corrosion resistance	none
Operating humidity range	5~95% (no condensation)
Operating temperature range	-20~60 °C
Maximum operating altitude	3000m (>2000m derating)
Dimensions (length*width*height)	880*1050*1600
weight	About 1000kg

# STANDARD ENERGY STORAGE CABINET





- Integrated design with flexible and variable module layout; small footprint, high energy density, easy maintenance.
- Uses lithium iron phosphate (LiFePO4) power cells, with independent fire protection and fault warning management systems, ensuring safety and reliability.
- Supports user terminal monitoring to understand system operation.

PROJECT	SYSTEM PARAMETERS
Battery type	LFP,3.2V/280AH
Battery module	16S1P-51.2V280AH,14.336KWH
Number of battery modules	3pcs
Rated capacity	43kwh
Rated voltage	51.2v
Voltage range	41.6v~58v(2.6v~3.65v)
Charge and discharge rate	≤0.5C
Discharge depth	95%
Communication interface	RS485/CAN
Cooling method	Natural air cooling
Fire protection system	None
PCS	
Rated power	10KW*2 (single-phase inverter)
Input source	L+N+PE
Voltage	220V/230V/240VAC
Frequency	50/60Hz
Output voltage	220V/230V/240VAC±5%
Rated grid frequency	50/60Hz±0.1%
Maximum efficiency	98%
Waveform	Pure sine wave
Communication interface	RS485/CAN
Grid switching	Optional grid-connected function
MPPT	
Rated power	2*5500W (dual circuit)
PV side voltage	90~500V (optimal voltage 300~400V)
Maximum current	150A
SYSTEM	
Installation location	Indoor
Protection level	IP55
Display	LCD display: operation mode/load/input/output, etc.
Operating humidity range	20~95% (non-condensing)
Operating temperature range	-20~60°C
Maximum operating altitude	4000m (>1000m derating)
Dimensions (length * width * height)	
Weight	

# STANDARD ENERGY STORAGE CABINET





# STANDARD ENERGY STORAGE CABINET

PROJECT	SYSTEM PARAMETERS	REMARK
Battery Type	LFP,3.2V/280AH/300Ah/314Ah	
Battery Box	48S1P-153.6V280AH/300Ah/314Ah,43Kwh/46Kwh/48Kwh	
Battery Box Quantity	5pcs	
Rated Power	215Kwh/230Kwh/241Kwh	
Rated Voltage	768V	
Voltage Range	648V~876(2.7v~3.65v)	
Charge And Discharge Rate	≤ 1C	
Discharge Depth	90%	
Communication Interface	RS485/CAN	
Cooling Method	Intelligent Air Cooling	
PCS Parameters		

PCS		
Operating Voltage Range	615~950V(3W+PE)/650~950 V(3W+N+PE)	DC Side
Full Load Voltage Range( V)	615-950V(3W+PE)/680~950 V(3W+N+PE)	
Input Circuit	1	
Maximum Current	170A	
Rated Voltage	230/400 V	
Voltage Deviation	-15%~+15%	
AC Output Type	(3W+PE )Three-Phase Three-Wire/(3W+N+PE )Three-Phase Four-Wire	AC Side (Grid-Connected)
Rated Output Power	105KW	
Maximum Output Power	116KW	
Maximum Current	167A	
Rated Grid Frequency	50/60Hz	
Power Factor	0.99	
Power Factor Range	1 (Leading)~1( Lagging)	
Current Distortion Rate	<2% (Rated Power)	
DC Component	0.5%	
Overload Capacity	110% Long Term	
Maximum Efficiency	98.5%	
Rated Output Voltage	230/400 V	
AC Voltage Harmonics	3%(Linear Load)	
Rated Frequency	50/60 Hz	
Rated Output Power	105KW	
Maximum Apparent Power	116KW	
Maximum Output Current	167A	

SYSTEM PARAMETERS	
Installation Location	If You Need To Install It Outdoors, You Need To Build A canopy.
Protection Level	IP54
Corrosion Resistance	None
Operating Humidity Range	0~95%(No Condensation)
Operating Temperature Range	-20~60 °C
Maximum Operating Altitude	3000m(>2000m Derating)
Cooling Method	Strong Exhaust
Dimensions (W*D*H)	2050*1602*1555
Weight	2000Kg



- Integrated design with flexible and variable module layout; small footprint, high energy density.easy maintenance.
- Uses (LiFePO4) modules, safe and reliable, with independent fire protection and fault warning management systems.
- Eaiipped with separate liquid cooling and external exhaust systems for good cabinet temperature control.
- Supports remote monitoring, data transmission, cloud platform manageme, and multi-level user permissions.



# STANDARD ENERGY STORAGE CABINET

- Adopting an integrated design, the functional modules are flexibly arranged; with a small footprint, high energy density, and easy maintenance.
- Compatible with CAN and RS485 communication, it matches various brands of inverters, richly meeting customer needs
- Supports user terminal monitoring to understand system operation status.

PROJECT	SYSTEM PARAMETERS
Product Model	EC-100-50
Battery Parameters	
Cell Type	LFP-280Ah
System Configuration	1P112S
Battery Capacity	100KWH
Battery Voltage Range	280~408.8V
AC Grid Parameters	
Grid Type	Hybrid Inverter
Rated Power	50KW
Rated Grid Voltage	380VAC
Grid Frequency	50Hz/60Hz
Rated Current	140A
General Parameters	
Dimensions (L*D*H)	1090*830*1210mm
Communication Method	CAN/RS485/Ethernet
Protection Level	IP20
Operating Temperature	-30~55°C
Cooling Method	Air Cooling
Humidity Range	0~95%(non-condensing)
Operating Altitude	<2000m
Noise Level	≤75dB
Corrosion Level	C3





## ITEMS

## SPECIFICATIONS

Model	CTMONO100	CTMONO200
Maximum Power at STC	100W	200W
Optimum Operating Voltage (Vmp)	20.4V	19.2V
Open-Circuit Voltage (Voc)	24.3V	23V
Optimum Operating Current (Imp)	491A	10.42A
Short-Circuit Current(Isc)	5.21A	11.05A
Operating Temperature	-40°C-85°C(-40°F-185°F)	20A
Maximum Series Fuse Rating	15A	600V DC
Maximum System Voltage	600V DC	0.79m(2.6ft)
Output Cable	0.6m(1.97ft)	12kg(26.46lbs)
Weight	6.4 kg(14.1 lbs)	1491x 699 x35 mm
Dimensions	1062x 530x35 mm (41.8 x 20.9 x 1.38 in)	(58.7 x 27.5 x 1.38 in)

## SPECIFICATIONS

CTMONO550	CTMONO600	CTMONO650
550W	600W	650W
42.71V	34.4V	37.4V
50.14V	41.5V	37.3V
12.88A	17.45A	17.39A
13.68A	18.52A	18.44A
25A	30A	30A
1000/1500V DC	1000/1500V DC	1500V DC
0.2m(0.65ft)	0.2m(0.65ft)	0.2m(0.65ft)
28.3kg(62.39lbs)	30.9 kg / 68.12 lbs	33.6 kg / 74.07 lbs
2278 x1134 x35 mm (89.68 x 44.64 x1.38 in)	2172 x 1303 x35 mm (85 x51.29 x1.38 in)	2384 x1303 x35 mm (93 x 51.29 x 1.38 in)





T H E R E I S S U N N Y  
T H E R E I S P O W E R



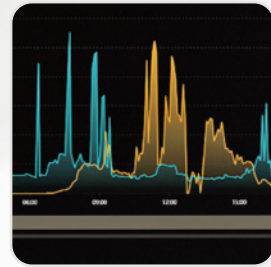
# PRODUCT FEATURES



SEC  
(Smart Energy Control)



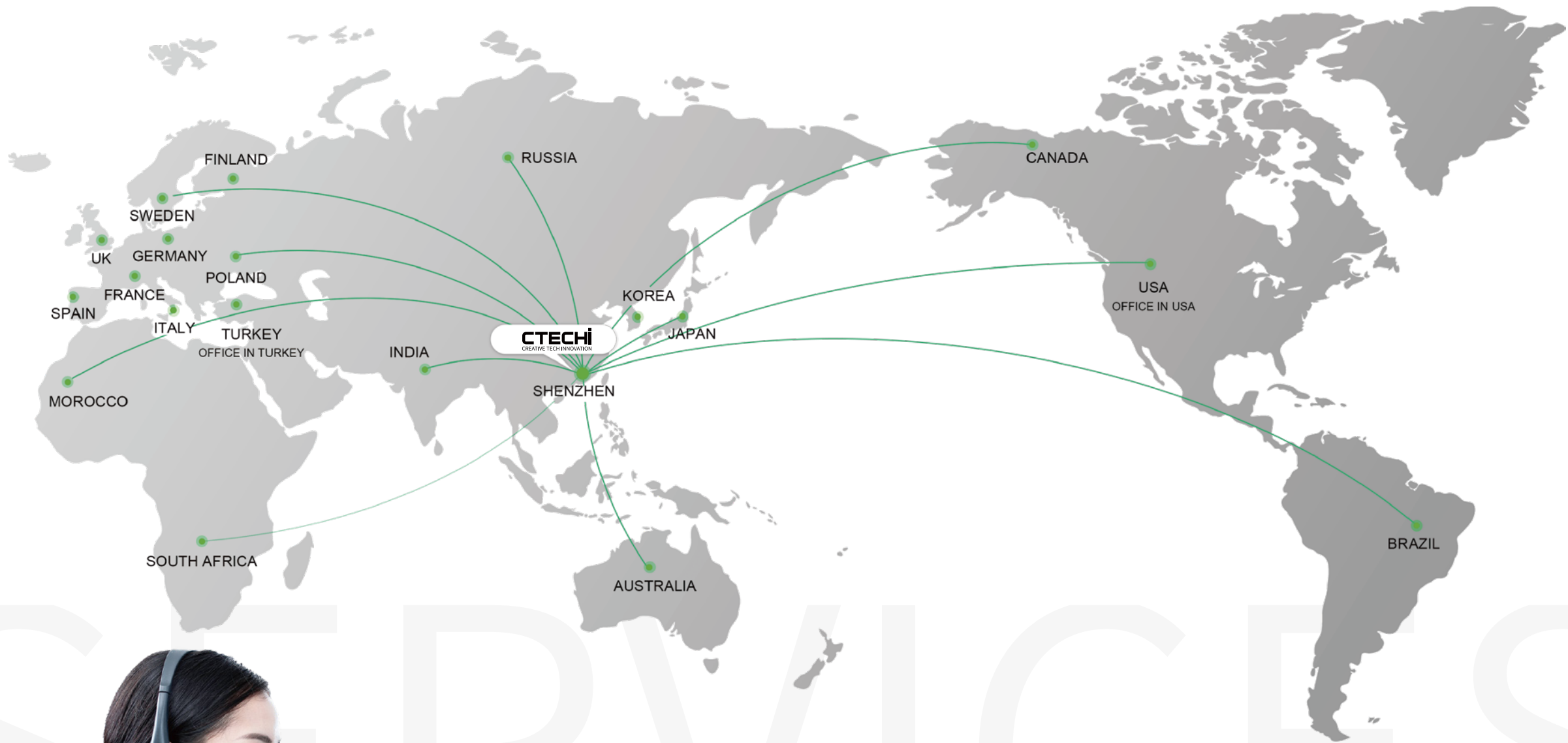
All Using  
Lithium Iron Phosphate



Operation And Maintenance  
Monitoring Platform







SERVICES



**ONLINE + OFFLINE 360°  
PROFESSIONAL SERVICE**

Global service support centers in mainland China, Hong Kong , Europe, the United States, Japan, South Korea, Australia , etc. 24\*7\*365 online instant service support

<b>126</b>	<b>468</b>	<b>10000+</b>	<b>10Gwh</b>
			
Countries	Cities	Project	Cumulative Sales



# RICH GLOBAL EXPERIENCE IN LARGE-SCALE ENERGY STORAGE PROJECTS



## China tower mobile base station power supply

2018 , undertook the power supply project of China Tower Mobile Base Station located in western Guangdong. This is the company's first large-scale project in the true sense. After repeated surveys and discussions, the project team finally output 48V50Ah/100Ah/150Ah/200Ah power supply solutions for China Tower mobile base stations .



## Royal academy off-grid energy storage system

The Royal College, also known as Imperial College, was founded in 1907 in London, England, by Queen Victoria and Prince Albert in 1845, the Royal Academy of Sciences and the British Empire Institute, the Royal College of Mines, London City and Guild College of the amalgamation, was a member of the University of London.2020 , based on years of deep cultivation and accumulation in the industry, the company has reached a cooperation with the Royal Academy of England, and the company will provide it with a 50KWh off-grid energy storage system to meet its daily power reserve.



2021

Undertook US hotel backup 1MW/2MWh power system



2019

Undertook African 150KWh solar energy storage projects



2019

Undertook Villa energy storage power supply 200KWh system in Zimbabwe