PRODUCT CATALOG

UNICONVTOR TECHNOLOGY

GLOBAL PRESENCE AS A LEADER IN POWER ELECTRONIC CONVERTERS

Business philosophy: Integrity, commitment, efficiency and innovation.
Quality policy: Quality first, the pursuit of excellence.

Mission

Continuous innovation to provide clean energy solutions and services

Vision

Becoming a leader in power electronic converters by serving the world with our products.

Values

Customer-oriented, create a win-win situation together

CONTENTS

ABOUT UNC

Qingdao UNC Technology Co., Ltd. was founded in 2021 and is headquartered in Qingdao, Shandong Province. It is a scientific and technological enterprise based on new energy industry, focusing on the research of new energy power supply (photovoltaic, energy storage, etc.) equipment power electronic conversion technology, integrating independent innovation, research and development, production, sales and service as a whole.

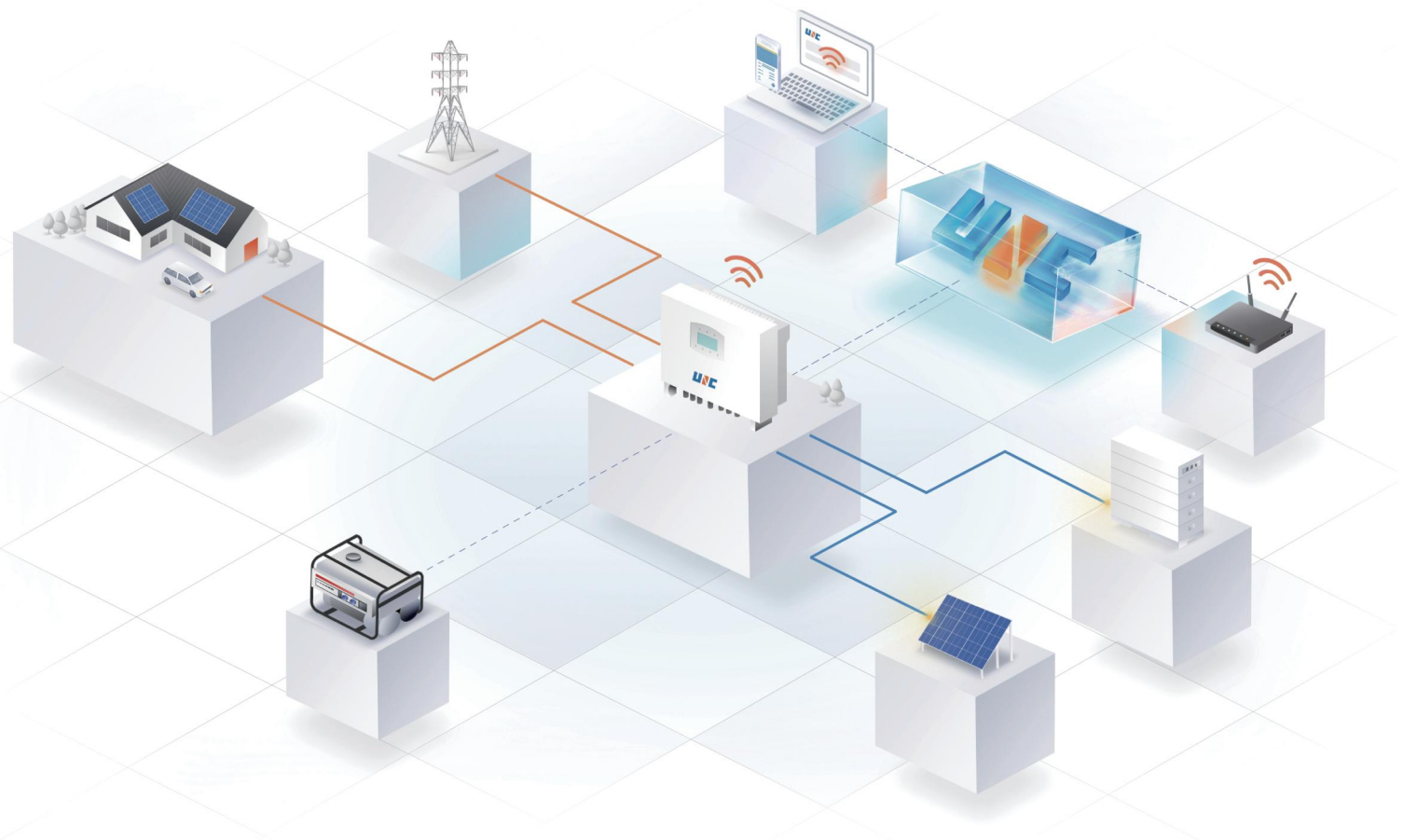
The company's products cover a wide range of categories, such as household energy storage converters, PV inverters, energy storage PCS, etc., targeting both domestic and international markets (Europe, America, Brazil, India, Southeast Asia, etc.). The core members of the team have 10 years of experience in power electronics, dual-control, structural, electrical and other related disciplines, and their technical reserves cover a wide range of fields such as photovoltaic, energy storage, charging and smart micro-grid, DC grid, etc. The company has built more than 10,000 square meters of inverters and PCS for household use.

The company has built its own intelligent factory with more than 10,000 square meters of production capacity of PV inverters, hybrid inverters, energy storage PCS and other related power electronic products.

The company has always been adhering to the people-oriented, technology-driven concept of commitment to become a leader in the power electronics converter industry. We are determined to contribute to the realization of China's “double carbon” goal and the development of global renewable energy.

CERTIFICATIONS

Household Energy Storage Solutions



Efficient and flexible

- Photovoltaic storage, can meet the basic needs of the family for several days of electricity consumption;
- Support parallel, diesel-electricity access to weak grid grid SCR <1.5;
- 60% rated capacity motor with load capacity;
- Parallel/off-grid multiple operating modes for flexible utilization.

Safe and reliable

- IP65/IP66 waterproof and dustproof, adapting to all kinds of complex and harsh environments;
- Natural heat dissipation/intelligent air-cooling, low temperature rise, long service life;
- Optional AFCI DC arc fault, protection function, safer;
- The core components are selected from the world's well-known brands.

Friendly and convenient

- Backstage and APP, 24-hour data monitoring, real-time information on electricity consumption;
- Multi-model battery adaptation, targeted charging and discharging strategies;
- Sensorless switching on/off grid, uninterrupted operation of critical loads.

Hybrid Inverter

Hybrid inverters can convert the direct current generated by photovoltaics into alternating current and store the energy in batteries.
Can be used to optimize self consumption. It can also be stored in batteries for future use or fed into the public grid. The working mode depends on the photovoltaic energy and user preferences.For different usage scenarios, our company has developed multiple series of products such as single-phase hybrid grid connected/off grid machines and three-phase hybrid grid connected machines for customers to choose from.

PV and Battery All-In-One

ESS1- (4.6-6) K-LV-F-AIO is an intelligent device that integrates photovoltaic power generation and energy storage systems. It integrates core components such as energy storage batteries, inverters, and control systems into a compact body, providing users with stable and clean power supply through efficient energy conversion and storage technology. This is our innovative work in the field of new energy.

Household Energy Storage System

Household energy storage batteries not only help achieve household use and reduce electricity costs, but also play an important role in user demand response, electric vehicle energy storage, special scenario applications, and integrated energy-saving energy storage and charging in commercial complexes. To meet the diverse needs of customers in multiple scenarios, our company has developed various forms of batteries such as rack mounted, stacked, and wall mounted for customers to choose from.

Single Phase Hybrid Inverter 3-6kW(Grid connection)

- Maximum charging and discharging current of 120A battery
- Maximum parallel operation of 16 units
- MPPT current 15A, supporting high-power components
- The critical load UPS and off grid switching time is less than 10ms
- Support integration of diesel and electricity
- Fanless natural heat dissipation

Product Model	ESS1-3K1P-02-LV	ESS1-3.6K1P-02-LV	ESS1-4.6K1P-02-LV	ESS1-5K1P-02-LV	ESS1-6K1P-02-LV
Input DC(PV)					
Recommended max.PV power	5kW		5.5kW	8kW	
Max.input voltage	580V				
Rated input voltage	350V				
Start-up voltage	120V				
MPPT voltage range	90-520V		120-520V		
Max.input current	15A/15A				
Max.short circuit current	22.5A/22.5A				
MPPT number/Max.input strings number	2/2				
Input/Output oc(Battery)					
Battery type	Lead-acid/Li-ion				
Battery voltage range	42-58V				
Max.charge/discharge power	3kW		5kW		
Max.charge/discharge current	72A		120A		
Communication Mode	RS485/CAN				
Output Ac					
Rated output power	3kW	3.6kW	4.6kW	5kW	6kW
Max.output power	3.3kW	4kW	4.6kW	5.5kW	6.6kW
Max.apparent output power	3.3kVA	4kVA	4.6kVA	5.5kVA	6.6kVA
Rated output current	13.6A	16.4A	20.9A	22.7A	27.3A
Max.output current	15.1A	18.2A	23.2A	25.2A	30A
Switch time of grid-connected and off-grid	<10ms				
Rated grid output voltage/frequency	L/N/PE 220V/230V 50Hz/60Hz				
Power factor	0.8 leading ...0.8 lagging				
THDv(@linear load)	<3%				
THDi	<2%				
Input AC					
Max.apparent input power	3.3KVA	4KVA	4.6KVA	5.5KVA	6.6KVA
Max.input current	15.1A	18.2A	23.2A	25.2A	30A
Rated grid input voltage/frequency	L/N/PE 220V/230V 50Hz/60Hz				
Effciency					
Max.efficiency	97.50%				
Standard					
Safety	IEC62109-1/-2				
EMC	EN61000-6-1/EN61000-6-3				
Basic parameters					
Dimensions (W*H*D)	362mmx546mmx252mm				
Cooling concept	Natural				
Weight	21.5kg				
Degree ofprotection	IP66				
Operating ambient temperature	-25~+60℃(>45 derating)				
Max.operation attitude	3000m				
Communication Mode	RS485/WIFI/GPRS/LAN				

Single Phase Hybrid Inverter 6-10kW(Grid connection)

- Maximum 208A charge and discharge current
- The maximum number of parallel machines is 16
- MPPT current 44A, supporting high-power components
- IP66 high protection level
- Support the connection of diesel electric and motor loads
- The critical load UPS and off grid switching time is less than 10ms

Product Mode	ESS2-6K1P-02-LV	ESS2-8K1P-02-LV	ESS2-10K1P-02-LV
Input DC(PV)			
Recommendedmax.PV power	9kW	12kW	15kW
Max.input voltage	500V		
Rated input voltage	360V		
MPPT voltage range	90-425V		
Max.inputcurren	44A/21A		
Mppt number/Maxinput strings number	2/3		
Input/Output DC(Battery)			
Battery type	Lead-acid/Li-Ion		
Bttery voltage range	40-60V		
Max.charge/discharge power	6kW	8kW	10kW
Max.charge/discharge curren	142A	190A	208A
Communication mode	RS485/CAN		
Charging curve	Three-paragraph		
AC(Off Grid)			
Max.output power	6kW	8kW	10kW
Switch time of grid-connected and off-grid	<10ms		
THDi	<2%(Linear load)		
AC(On Grid)			
Rated output power	6kW	8kW	10kW
Rated grid output voltage	LN/PE,220V/230V		
Rated grid output frequency	50Hz/60Hz		
Max.output curren	30A	40A	50A
Power factor	>0.99(Lead 0.8~lag 0.8)		
THDi	<2%(Full load)		
Eficiency			
Max.efficiency	>97.5%		
Protection function			
Island protection	Available		
Input Protection for reverse connection	Available		
AFCI protection	Optiona		
System Data			
Maximum number of parallel machines	16		
Communication Por	RS485/Wi-Fi(Optiona)/4G(Optiona)/LAN(Optional)		
Dimensions	620*350*196 mm		
Weight	25.7kg		27kg
Operating ambient temperature	-40～+60℃(>45℃Reduction)		
Degree of protection	IP66		
Cooling concept	Natural		Intelligent air-cooled

Three Phase Hybrid Inverter 8-12kW(Grid connection)

- The critical load UPS and off grid switching time is less than 10ms
- Support three-phase unbalanced loads
- Fanless natural heat dissipation
- 2 MPPT/4-channel string input, maximum input current of 26A
- Support 1.1 times continuous overload when connected to the grid and 1.5 times short-term overload when disconnected from the grid

Product Mode	ESS1-8K3P-02-HV	ESS1-10K3P-02-HV	ESS1-12K3P-02-HV
Input DC(PV)			
Recommended max.PVpower	12kW	15kW	18kW
Max.input voltage		1000V	
Rated input voltage		600V	
Start-up voltage		200V	
MPPT voltage range		200-850V	
Max. input current		26A/26A	
Max. short circuit current		39A/39A	
MPPT number/Max.input stings number		2/4	
Input/Output DC(Battery)			
Battery type		lithium iron phosphate	
Battery voltage range		180V-600V	
Max.charge/discharge power	8kW	10kW	
Max.charge/discharge current		30A	
Communication Mode		485/CAN	
Outout Ac			
Rated output power	8kW	10kW	12kW
Max. output power	8.8kW	11kW	13.2kW
Max,apparent output power	8.8kVA	11kVA	13.2kVA
Rated output current	12.1A	15.2A	18.2A
Max.output current	13.4A	16.7A	20A
Switching time of grid-connected and off-grid		<10ms	
Rated grid output voltage/frequency		3L/N/PE 380V/400V 50Hz/60Hz	
Power factor		0.8 leading ...0.8 lagging	
THDv(@linear load)		<3%	
THDi		<2%	
Input AC			
Max.apparent input power	8.8kVA	11kVA	13.2kVA
Max.input current	13.4A	16.7A	20A
Rated grid input voltage/frequency		3L/N/PE 380V/400V 50Hz/60Hz	
Efficiency			
Max.efficiency		98.10%	
Standard			
Safety		IEC62109-1/-2	
EMC		EN61000-6-1/EN61000-6-3	
System Data			
Dimensions (W*H*D)		556mmx482mmx196mm	
Cooling concept		Natural	
Weight		27.5kg	
Degree of protection		IP66	
Operating ambient temperature		-25~60℃ (>45 derating)	
Max.operation attitude		3000m	
Communication Mode		RS485/WIFI/GPRS/LAN	

Three Phase Hybrid Inverter 15-20kW(Grid connection)

- Maximum 50A battery charging and discharging current
- Supports up to 16 devices running in parallel
- IP66 high protection level
- Support three-phase unbalanced loads
- Support diesel engine access
- The critical load UPS and off grid switching time is less than 10ms

Product Model	ESS1-15K3P-02-HV-F	ESS1-20K3P-02-HV-F	ESS1-20K3P-02-HV-F
Input DC (PV)			
Recommended max.PV power	18kW	22.5kW	30kW
Max. input voltage	1000V		
Rated input voltage	620V		
MPPT voltage range	200-850V		
Continuous input current	32A/32A		
MPPT number/Max.input stings number	2/4		
Batteries			
Input/Output DC(Battery)	Lithium batteries		
Battery voltage range	120-600V		
Max. charge/discharge power	12kW	15kW	20kW
Max. charge/discharge current	50A		
Communication mode	RS485/CAN		
Charging curve	Three-paragraph		
AC(Off Grid)			
Max.output power	12kW	15kW	20kW
Switch time of gnid-connected and off-grid	<10ms		
THDi	<2%(Linear load)		
AC(On Grid)			
Rated output power	12kW	15kW	20kW
Rated grid output voltage	3L/N/PE, 380V/400V		
Rated grid output frequency	50Hz/60Hz		
Max. output current	25A		
Max. input current	34.1A		
Power factor	>0.99(0.8 leading ...0.8 lagging)		
THDi	<2%(Full load)		
Efficiency			
Max. efficiency	>97.5%		
MPPT effciency	>99.5%		
Protection function			
Island protection	Available		
Input Protection for reverse connection	Available		
100% three-phase unbalanced load	Available		
AFCI protection	Optional		
System Data			
Maximum number of parallel machines	16		
Communication Port	RS485/WIFI(Optional)/4G(Optional)/LAN(Optional)		
Dimensions	567mmx497mmx237mm		
Weight	29kg		31.6kg
Operating ambient temperature	-40 ~ +60℃ (>45 derating)		
Degree of protection	IP66		
Cooling concept	Natural		Intelligent air-cooled
AC-Input			
Rated Voltage	3L/N/PE 380/400V	3L/N/PE 380/400V	3L/N/PE 380/400V
Rated Frequency	50/60Hz	50/60Hz	50/60Hz
Max Input Current	27.3A	34.1A	45.5A

Single-Phase Hybrid Inverter 3.6-6.2kW(Off grid)

- Pure sine wave solar inverter
- Wide range input of photovoltaic voltage
- The inverter can operate without a battery
- Built in dust-proof kit, suitable for harsh environments
- Built in lithium battery automatic activation
- Intelligent charging design, optimizing battery life
- Dual output circuit
- Restore factory settings with one click

Product Model	MIC-3.6KW	MIC-4.2KW	MIC-6.2KW
Recommended Max. PV Power	6200W	6200W	6200W
Rated Output Power	3800W/3800VA	4200W/4200VA	6200W/6200VA
Max. Solar Charging Current	120A		
Photovoltaic Parameters			
Nominal Voltage/Maximum Voltage	360V/500V		
Start-up Voltage/initial Feeding Voltage	90V/120V		
MPPT Voltage Range	90V-450V		
MPPT Tracks The Number Of input Channels/Maximum input Curren	1/18A	1/18A	1/22A
AC Output Data			
Rated Output Voltage/Frequency	120V 50Hz	220/230/240VAC 50/60Hz	
Rated Output Current	30A	18.2A	27.0A
Voltage Range /Frequency	90-280VAC or170-280VAC 50/60Hz		
Max. Input Current	30A	30A	40A
Efficiency			
Max. Efficiency (Solar to AC)	98%		
Two Loads Output Data			
Full Load	3600W	4200W	6200W
Max. Main Load	3600W	4200W	6200W
Max. Second Load(Battery Mode)	1400W	1400W	2067W
AC Output Data (Battery Mode)			
Rated Output Voltage	120V 50Hz	220/230/240VAC 50/60Hz	
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	94%		
Battery Data			
Rated Battery Voltage	24VDC	24VDC	48VDC
Max. Solar Charging Current	120A		
Max. AC Charging Current	100A		
General Data			
Dimension D*W*H (mm)	423*334*110		
Weight (Kgs)	8.5	8.5	10
Communications	RS232/RS485/WIFI/GPRS		
Operating Ambient Temperature	-10~50℃		

Single-Phase Hybrid Inverter 7.2-10.2kW(Off grid)

- Pure sine wave solar inverter
- Wide range input of photovoltaic voltage
- The inverter can operate without a battery
- Built in dust-proof kit, suitable for harsh environments
- Built in lithium battery automatic activation
- Intelligent charging design, optimizing battery life
- Dual output circuit
- Restore factory settings with one click

Product Model	MASS-7.2KW	MASS-8.2KW	MASS-10.2KW
Recommended Max. PV Power	8200W	8200W	10200W
Rated Output Power	7200W/7200VA	8200W/8200VA	10200W/10200VA
Max. Solar Charging Current	160A	160A	160A
Photovoltaic Parameters			
Nominal Voltage/Maximum Voltage	360V/500V		
Start-up Voltage/initial Feeding Voltage	90V/120V		
MPPT Voltage Range	90V-450V		
MPPT Tracks The Number Of input Channels/Maximum input Curren	1/18A	2/18A	
AC Output Data			
Rated Output Voltage/Frequency	220/230/240VAC 50/60Hz		
Rated Output Current	31.3A	35.6A	44.3A
Voltage Range /Frequency	90-280VAC or170-280VAC 50/60Hz		
Max. Input Current	50A		
Efficiency			
Max. Efficiency (Solar to AC)	98%		
Two Loads Output Data			
Full Load	7200W	8200W	10200W
Max. Main Load	7200W	8200W	10200W
Max. Second Load(Battery Mode)	2400W	2733W	3400W
AC Output Data (Battery Mode)			
Rated Output Voltage	220/230/240VAC		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	94%		
Battery Data			
Rated Battery Voltage	48VDC	48VDC	48VDC
Max. Solar Charging Current	160A		180A
Max. AC Charging Current	140A		160A
General Data			
Dimension D*W*H (mm)	530*420*160		
Weight (Kgs)	14.5	14.5	15
Communications	RS232/RS485/WIFI/GPRS		
Operating Ambient Temperature	-10~50℃		

PV and battery F-all in one 4.6-6kW

- The maximum charging/discharging current can reach 120A
- Can quickly stack batteries for expansion
- Flexibly arrange the charging and discharging time of the inverter
- Multiple working modes can be configured
- Support off grid applications of diesel generators
- Support grid connected operation
- UPS level switching time (less than 10ms), always supporting critical loads

Product Model	ESS1-4.6K1P-02-LV-F-AIO	ESS1-5K1P-02-LV-F-AIO	ESS1-6K1P-02-LV-F-AIO
PV String Input Data			
Recommended Max. PV Power	8kW		
Max. Input Voltage	580V		
Rated Input Voltage	350V		
Start-up Voltage	120V		
MPPT Voltage Range	120-520V		
Max. Input Current	15A/15A		
Max. Short Circuit Current	22.5A/22.5A		
MPPT Number / String Number per MPPT	2/2		
Battery Input Data			
Battery Voltage Range	42-58V		
Max. Charging/Discharging Power	5kW		6kW
Max. Charging/Discharging Current	100A		120A
Communications	RS485/CAN		
AC Output Data			
Rated Output Power	4.6kW	5kW	6kW
Rated Output Power	4.6kW	5.5kW	6.6kW
Max. Apparent Output Power	4.6kVA	5.5kVA	6.6kVA
Rated Output Current	20.9A	22.7A	27.3A
Max. Output Current	23.2A	25.2A	30A
Switching Time	<10ms		
Rated Output Voltage/Frequency	L/N/PE 220V/230V 50Hz/60Hz		
Power Factor	0.8leading...0.8 lagging		
THDv	<3%		
THDi	<2%		
AC Input Data			
Max. Input Power	10kW		
Max. Apparent Input Power	10kVA		
Max. Input Current	50A		
Rated Input Voltage /Frequency	L/N/PE 220V/230V 50Hz/60Hz		
General Data			
Dimension D*W*H	610*436*257mm		
Cooling Concept	Forced-air		
Ingress Protection	IP65		
Operating Ambient Temperature	-25℃~+60℃（>45derating）		
Max. Operation Altitude	3000m		
Communications	RS485/WIFI/GPRS		
Battery Data			
Battery Type	lithium iron phosphate		
Battery Module Capacity	5.12kWh		
Rated voltage	51.2V		
Working voltage range	40-58.4V		
Max. Number of Parallel Modules	4		
Module Cycle Life	≥6000		
Max. Charging/Discharging Current	95A/95A		
Weight	610*436*212mm		
Dimension D*W*H	49kg		
Cooling Concept	Naturel		
Ingress Protection	IP65		
Operating Ambient Temperature	-25℃~+55℃		
Max. Operation Altitude	3000m		

PV and Battery All-In-One 4.6-6kW

- The maximum charging/discharging current can reach 120A
- Can quickly stack batteries for expansion
- Flexibly arrange the charging and discharging time of the inverter
- Multiple working modes can be configured
- Support off grid applications of diesel generators
- Support grid connected operation
- UPS level switching time (less than 10ms), always supporting critical loads

Product Model	ESS1-4.6K1P-02-LV-AIO	ESS1-5K1P-02-LV-AIO	ESS1-6K1P-02-LV-AIO
PV String Input Data			
Recommended Max. PV Power	8kW		
Max. Input Voltage	580V		
Rated Input Voltage	350V		
Start-up Voltage	120V		
MPPT Voltage Range	120-520V		
Max. Input Current	15A/15A		
Max. Short Circuit Current	22.5A/22.5A		
MPPT Number / String Number per MPPT	2/2		
Battery Input Data			
Battery Voltage Range	42-58V		
Max. Charging/Discharging Power	5kW		
Max. Charging/Discharging Current	100A		120A
Communications	RS485/CAN		
AC Output Data			
Rated Output Power	4.6kW	5kW	6kW
Rated Output Power	4.6kW	5.5kW	6.6kW
Max. Apparent Output Power	4.6kVA	5.5kVA	6.6kVA
Rated Output Current	20.9A	22.7A	27.3A
Max. Output Current	23.2A	25.2A	30A
Switching Time	<10ms		
Rated Output Voltage/Frequency	L/N/PE 220V/230V 50Hz/60Hz		
Power Factor	0.8leading...0.8 lagging		
THDv	<3%		
THDi	<2%		
AC Input Data			
Max. Input Power	10kW		
Max. Apparent Input Power	10kVA		
Max. Input Current	50A		
Rated Input Voltage /Frequency	L/N/PE 220V/230V 50Hz/60Hz		
General Data			
Dimension D*W*H	610*436*257mm		
Cooling Concept	Natural		
Ingress Protection	IP65		
Operating Ambient Temperature	-25℃~+60℃（>45 derating）		
Max. Operation Altitude	3000m		
Communications	RS485/WIFI/GPRS		
Battery Data			
Battery Type	lithium iron phosphate		
Battery Module Capacity	5.12kWh		
Rated voltage	51.2V		
Working voltage range	40-58.4V		
Max. Number of Parallel Modules	4		
Module Cycle Life	≥6000		
Max. Charging/Discharging Current	95A/95A		
Weight	610*436*212mm		
Dimension D*W*H	49kg		
Cooling Concept	Naturel		
Ingress Protection	IP65		
Operating Ambient Temperature	-25℃~+55℃		
Max. Operation Altitude	3000m		

Household Energy Storage System (Rack Mounted)

- Small size and light weight
- The standard cycle life exceeds 5000 times
- Easy installation, convenient operation and maintenance
- Multiple parallel machines for easy expansion; Automatic addressing, no need to dial code
- Screen direct inverter communication
- Accurately estimate the state of charge of the battery pack, that is, the remaining battery capacity, to ensure that the battery pack's power is maintained within a reasonable range

产品型号	UNC24V-220Ah	UNC48V-100Ah-R (Voltage selectable 51.2V)	UNC48V-200Ah-R (Voltage selectable 51.2V)
Rated Voltage（V）	25.6	48	
Rated Capacity （Ah）	210	105	210
Nominal energy level（kWh）	5.3	5	10
Working Voltage Range(V)	22.4-29.2	42-54.75	
Recommended Charging Voltage（V）	28	52.5	
Recommended Discharge Cut-off Voltage(V)	24	45	
Rated Charging Current(A)	100	50	100
Max. Continuous Charging Current (A)	200	100	200
Rated Discharging Current	100	50	100
Max, Discharging Current	200	100	200
Transparent temperature(℃)	-30~60（recommend10~35）		
Allowable humidity range	0-95 No condensation		
Operating Ambient Temperature（℃）	-20~65（recommend 10~35）		
Protection grade	IP20		
Cooling Concept	Natural air cooling/intelligent fan		
Cycle Life	80%DOD下5000+		
Dimension D*W*H (mm)	596X545X155	540X545X155	610X510X246
Weight (Kg)	48	44.5	88.3

Household Energy Storage System (Stacked)

- One click power on/off of the system
- Bluetooth+Wifi solution, can be viewed and operated remotely, and can be accessed through a mobile app
- Implement automatic dialing and parallel operation between PACK groups without the need for manual settings
- Multi cluster parallel operation, supporting up to 32 battery packs in parallel
- The Chinese and English display screens summarize all battery information, and the screen directly communicates with the inverter

Product Model	GLV1-P10	GLV1-P15	GLV1-P20	GLV2-P20	GLV2-P30	GLV2-P40
Battery module model	48100			48200		
Rated Module Capacity (kWh)	4.8			9.6		
Rated Voltage(V)	48					
Number of Battery Module	2	3	4	2	3	4
Rated Battery Pack Capacity (kWh)	9.6	14.4	19.2	19.2	28.8	38.4
Max. Parallel Unit	8					
Voltage Range(V)	42~54.75					
Rated Charging Voltage(V)	51.75					
Rated Discharging Cut-off Voltage(V)	45					
Max. Charging Rate(A)	0.5C					
Max. Discharging Rate(A)	0.5C					
Dimension D*W*H (mm)	700*425*672	700*425*964	700*425*1056	700*479*848	700*479*1128	700*479*1408
Weight (Kg)	145	199	254	228	324	420
Communications	CAN/485/Bluetooth					
Operating Ambient Temperature (℃)	-30~65(recommend10~35)					
Storage Temperature (℃)	-20~65(recommend10~35)					
Humidity Range (%rh)	85					
Protection grade	IP20					
Ingress Protection	Natural air cooling					
Cycle Life	≥5000					
Safety Standards	CE,UN38.3,MSDS					

Household Energy Storage System (Wall Mounted)

- Wall mounted installation, saving space
- The standard cycle life exceeds 5000 times
- Environmentally friendly and pollution-free materials, free of heavy metals, green and environmentally friendly
- Multiple parallel machines, convenient for expansion, automatic addressing, no need to dial code
- Standard LCD display screen, real-time understanding of battery status, screen direct inverter communication protocol
- Remote viewing error, online software upgrade

Product Model	GBP48V-200AH-R (Voltage selectable 51.2V)	GBP48V-200AH-R (Voltage selectable 51.2V)
Battery Module Model（V）	48	
Rated Module Capacity (Ah)	105	210
Nominal energy（kWh）	5	10
Voltage Range(V)	42-54.75	
Rated Charging Voltage(V)	52.5	
Rated Discharging Cut-off Voltage(V)	45	
Rated Charging Current (A)	50	100
Max. Charging Current (A)	100	200
Rated Discharging Current (A)	50	100
Max. Discharging Current (A)	100	200
Operating Ambient Temperature (℃)	-30~60（recommend10~35）	
Humidity Range（%rh）	0-95 No condensation	
Storage Temperature (℃)	-20~65（recommend10~35）	
Protection grade	IP20	
Cooling method	Natural air cooling	
Cycle Life	80%DOD下5000+次	
Dimension D*W*H (mm)	628X410X186	682X465X276
Weight (Kg)	45.7	89.6

Commercial & Industrial Energy Storage Solutions

Intelligent and efficient

- Independent heat dissipation air duct design for high reliability;
- Advanced three-level technology.

Grid support

- Supports high/low voltage ride-through, frequency ride-through, low SCR operation, and strong grid adaptability;
- Supports fast power response (<20ms).

Application Flexibility

- Three-phase three-wire, three-phase four-wire system can be flexibly selected;
- Supports parallel connection of multiple machines, good scalability.

Commercial and Industrial Energy Storage Products

Energy Storage Converter

By adopting a three-level topology structure, bidirectional conversion from DC to AC and AC to DC can be achieved. It can convert AC power into DC power to charge the battery, or convert DC power into AC power to supply power to the load or feedback to the grid.

Energy Storage Integrated Cabinet

The industrial and commercial 232 energy storage cabinet plays an important role in energy storage, peak and valley electricity price regulation, backup power supply, intelligent management, environmental protection and sustainable development, providing more efficient, economical and environmentally friendly energy solutions for industrial and commercial users.

Modular Energy Storage Inverter 100K

Three level modular design, bidirectional energy conversion

On-demand allocation, peak shaving and valley filling, local automatic operation

No vulnerable parts, modular with N+1 redundancy

Product Model	PCS1-100K
DC side parameters	
DC voltage range	580-950V
Maximum input current	175A
Parameters ofAC grid connection	
Rated AC power	100kVA
maximum power	110kVA
Rated grid voltage	400V ± 15%
Rated grid frequency	50Hz/60Hz ± 2.5Hz
Alternating current harmonics	< 3% (at rated power)
DC component ofAC current	< 0.5%In
power factor	± 1
AC off-grid parameters	
Rated AC power	400V ± 15%
Alternating voltage harmonic	< 3% (at rated power)
DC voltage component	< 0.5%Un
Rated grid frequency/grid frequency range	50Hz/45-55Hz
System parameter	
Mode of isolation	Non isolated
Maximum efficiency	98.50%
Cooling mode	Forced air cooling
Protection class	IP20
Dimension (W * H * D) mm	485*220*780mm
Mode of communication	
Host computer communication mode	ModBusRTU.CAN2.0
Communication interface	RS485/CAN

Tower Crane Type Energy Storage Converter(250/500/630K)

- Off grid switching time ＜ 20ms
- Maximum efficiency>99.1%
- Supports parallel operation, diesel power connection, and weak grid connection with SCR<1.5

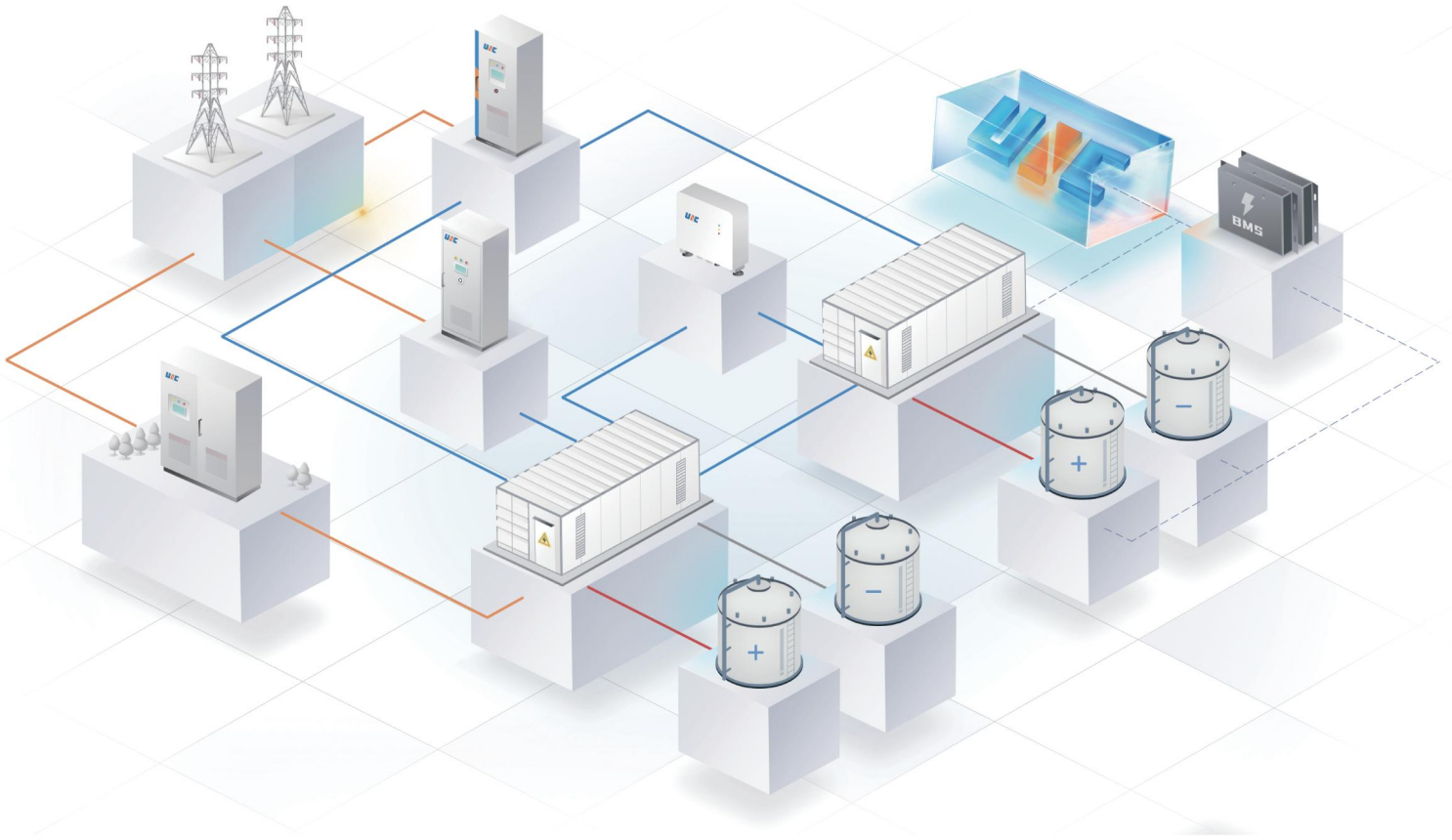
Product Model	PCS1-250K	PCS1-500K	PCS1-630K
DC side parameters			
DC voltage range	580-900V		
Maximum input current	459A	917A	1155A
Parameters ofAC grid connection			
Rated AC power	250kVA	500kVA	630kVA
Maximum power	275kVA	550kVA	693kVA
Rated grid voltage	400V ± 15%		
Rated grid frequency	50Hz/60Hz ± 2.5Hz		
Alternating current harmonics	< 3%(at rated power)		
DC component ofAC current	< 0.5%In		
power factor	± 1		
AC off-grid parameters			
Rated AC power	400V ± 15%		
Alternating voltage harmonic	< 3%(linear load)		
DC voltage component	< 0.5%Un (linear load balance)		
Rated grid frequency/grid frequency range	50Hz/45-55Hz		
System parameter			
Mode of isolation	Non isolated		
Maximum efficiency	98.5%	98.7%	99.10%
Cooling mode	Forced air cooling		
Protection class	IP20		
Dimension (W * H * D) mm	800*1900*800mm	900*1900*900mm	1100*1900*900mm
Mode of communication			
Host computer communication mode	ModBusTCP/RTU,CAN2.0		
Communication interface	Network port, RS485, CAN		

Energy Storage Integrated Cabinet(100K/232kWh)

- Design lifespan>10 years
- Integrated design, with highly integrated single cabinet PACK, PCS, EMS, and fire protection systems, resulting in high space utilization;
- High quality battery cells with long cycle life, excellent performance, good consistency, safe and reliable cycle life ≥ 6000 times
- Self developed battery management system, connecting batteries to the power grid, and quickly scheduling corresponding tasks
- Self developed PCS energy storage inverter and EMS, fully automatic control of energy storage charging operation, automatic tracking of system power changes
- Choose the optimal operating strategy to achieve integration of source, network, load, and storage

Product Model	ESS1-100K/232kWh
Rated AC Power(kW)	100
Max. AC Power(kW)	110
Rated grid voltage	3W+N+PE.380
Grid voltage range	±10%
Rated grid frequency (HZ)	50±5
Grid frequency range	±2
DC Injection Current	<05%IN
Overload capacity	1.1
Cell Type	280AH lithium iron phosphate battery
Single Battery Pack Capacity(kWh)	46.59
Number of Battery Pack	5
Relative temperature (non-condensing)	0-95%
Temperature control method	Liquid-cooled (optional air-cooled)
Battery System Capacity(kWh)	232
Run time(h)	2
Battery Life	≥6000次
PCS Maximum Efficiency	98.2%
Surge Protection	DC secondary/AC secondary
Dimension D*W*H(mm)	1000*2200*1350
Weight(kg)	2.7T
Mode of Isolation	Not isolation
Parallel and off-grid switching device	Optional
Protection class	IP54
Operating Temperature Range	-20° ~ 55° (>45° reduced operation)
Communications	RS485,LAN
Communication protocols	Modbus

Liquid Flow Energy Storage Solutions



Flexible Configuration

- Selection of equalizer type according to different scenarios;
- Configuration of energy storage converters according to different power levels.

Efficient management

- Acceptable EMS dispatch for vanadium-liquid battery systems;
- A variety of working modes can be selected, energy saving and efficiency.

Liquid Flow Energy Storage Converter

The device is developed specifically for liquid flow systems, and can be started at 0V according to the characteristics of liquid flow batteries. It can efficiently convert AC power into DC power to charge the liquid flow battery, or convert DC power into AC power to supply power to the load or feedback to the grid.

AC Type/DC Type Equalizer

The AC type/DC type equalizer product is designed by our company specifically for the SOC balancing problem of each component subsystem in the all vanadium flow battery system. This device has functions such as active SOC balancing and bidirectional energy flow. It can effectively solve the SOC balancing problem between multiple subsystems of vanadium liquid batteries, reduce system maintenance time, improve system utilization, and reduce the overall user cost of the system.

Liquid Flow Energy Storage Converter

- High dynamic response, with full load switching time as low as 10ms
- Support parallel operation of multiple machines, expandable to 2MW
- Seamless off grid switching, quick response, ensuring continuous uninterrupted power supply for critical loads
- Independent regulation of active and reactive power to improve power quality

Product Model	PCS1-250KL	PCS1-500KL	PCS1-630KL	PCS1-800KL
DC side parameters				
DC voltage range	0-900V			
Maximum input current	459A	917A	1155A	1467A
Parameters ofAC grid connection				
Rated AC power	250kVA	500kVA	630kVA	800kVA
Maximum power	275kVA	550kVA	693kVA	880kVA
Rated grid voltage	400V ± 15%			
Rated grid frequency	50Hz/60Hz ± 2.5Hz			
Alternating current harmonics	< 3%(at rated power)			
DC component ofAC current	< 0.5%In			
Power factor	± 1			
AC off-grid parameters				
Rated AC power	400V ± 15%			
Alternating voltage harmonic	<3% (linear load)			
DC voltage component	< 0.5%Un (linear load balance)			
Rated grid frequency/grid frequency range	50Hz/45-55Hz			
System parameter				
Mode of isolation	Non isolated			
Maximum efficiency	98.5%	98.7%	99.1%	99.1%
Cooling mode	Forced air cooling			
Protection class	IP20			
Dimension (W * H * D) mm	900mmX1900mmX800mm	900mmX2000mmX900mm	1100mmX2000mmX900mm	1200mmX2000mmX900mm
Mode of communication				
Host computer communication mode	ModBusTCP/RTU,CAN2.0			
Communication interface	Network port, RS485, CAN			

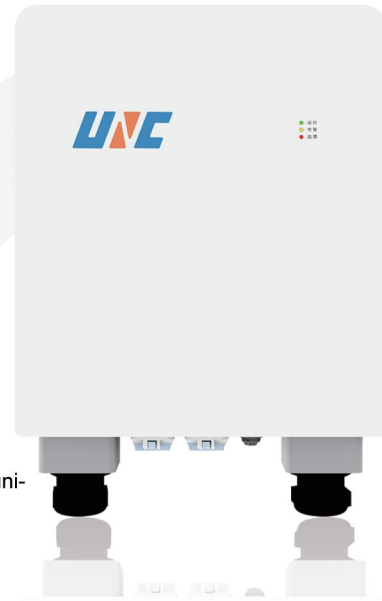
AC Type Equalizer

- Communication function with BMS to enhance system protection and fault tolerance mechanism
- Multiple working modes such as automatic online balancing and scheduling balancing
- Can accept EMS scheduling for vanadium liquid battery system, with communication methods including RS485, CAN, Ethernet, etc
- Subsystem AC/DC side protection function, which can set equalizer limit power, current, voltage and other information, IP65 outdoor protection design, C5 anti-corrosion design, convenient for additional installation under existing projects

Product Model	SOC1-040K3P-450V
Parameters at AC side	
Alternating current capacity	40kVA
RatedAC active capacity	40kW
RatedAC output voltage	380V(customizable)
Output range ofAC voltage	-7%~10%
Power factor regulation range	0.9（Leading）~0.9（(lagging）
Frequency at AC side	50Hz±2Hz
Short-circuit breaking capacity of AC side	≥35kA
AC withstand voltage level	2500V
Automatic recognition of AC phase sequence	Yes
DC side parameters	
DC charging and discharging operating voltage range	150-450V
Rated DCinput current	280A
Maximum DCinput current	310A
DC side short circuit breaking capacity	≥20kA
Functional Description	
Ratedpower	40kW
Maximum efficiency	>97.5%（excluding transformer）
No load loss	≤0.8%（Rated power) (excluding transformer)
Overload capacity	Long-term 110% overload, 120% overload for 10min
Requirements for parallel and off-grid	Grid-connected P/Q mode
Protection class	IP65
Corrosion protection grade	C5
Overall dimensions (W * H * D)	≤900*2200*800mm
Weight	≤1000kg
Communication interface	Network port, RS485, CAN

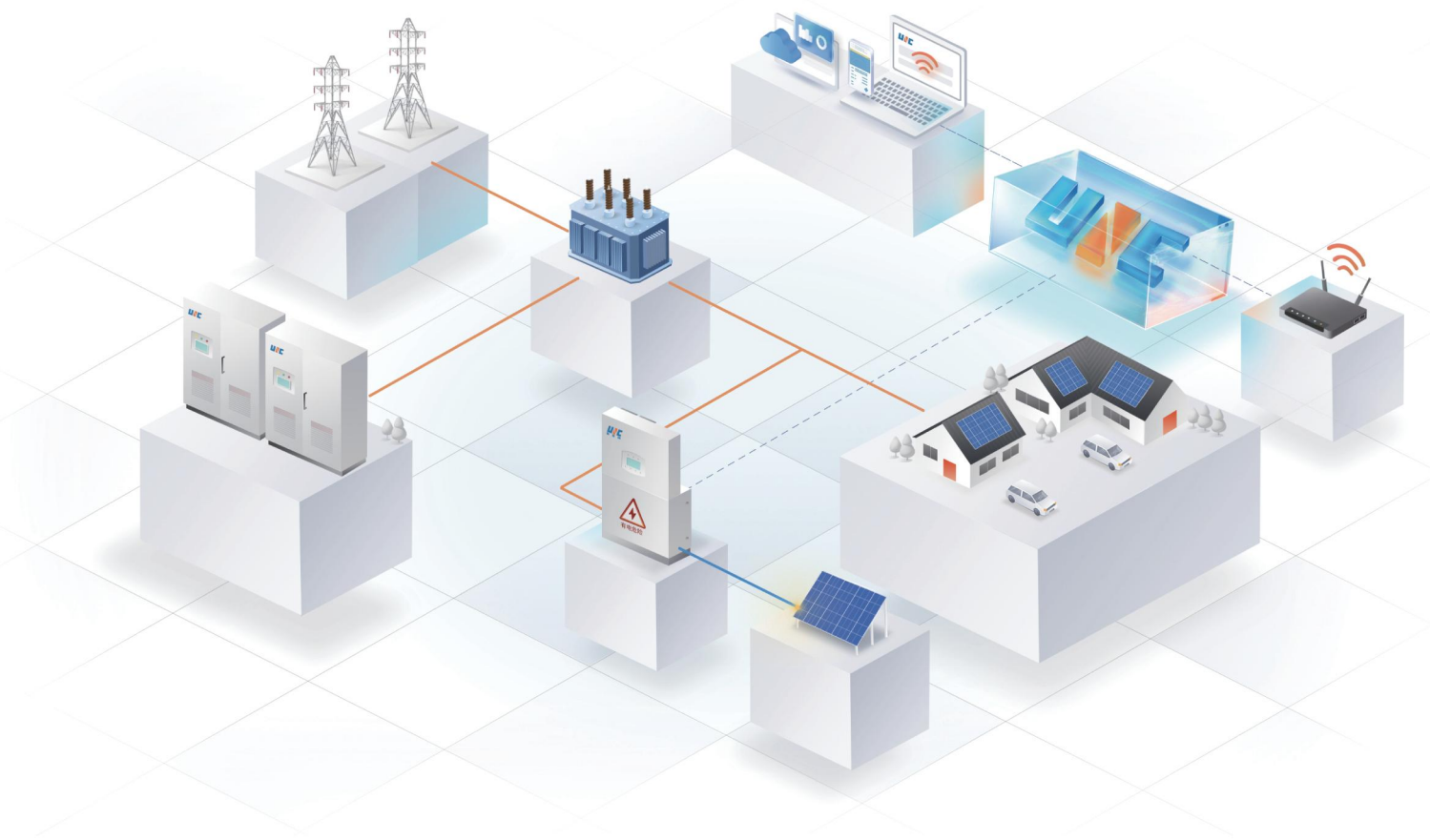
DC Type Equalizer

- Communication function with BMS to enhance system protection and fault tolerance mechanism
- Multiple working modes such as bidirectional operation, automatic online balancing, scheduling balancing, etc
- IP54 outdoor protection design, convenient for additional installation under existing projects
- Can accept EMS scheduling for vanadium liquid battery systems, with communication methods including RS485, CAN, Ethernet, dry contacts, etc



Product Model	DC300V-200VDC-20kW	DC300V-200VDC-30kW
High pressure parameter		
HV side voltage range	300~850Vdc	
Rated current at HV side	60A	80A
Low voltage parameter		
LV side voltage range	200~850Vdc	
Rated current at LV side	100A	133A
Ripple of DC voltage at LV side	<2%	
Ripple of DC current at LV side	<5%	
Low-voltage side voltage stabilization accuracy	<±5% f.s.	
Low-voltage side current stabilization accuracy	<±7% f.s.	
Withstand voltage level	2500Vrms/50Hz	
Short-circuit breaking capacity at high and low voltage sides	≥20kA	
Function description		
Constant power charge and discharge function	Yes (constant low voltage side)	
Constant voltage charge and discharge function	Yes	
Constant current charge and discharge function	Yes	
On-line switching of constant voltage, constant current and constant power modes	Yes	
HV side droop function	Yes	
Battery interlocking dry contact	Yes	
System parameter		
Rated power	20KW	30KW
Maximum efficiency	>98.5%	
No load loss	≤0.8% (rated power)	
Overload capacity	Long-term 110% overload, 120% overload for 10min	
Protection class	IP54	
Communication interface	RS485、CAN	

Power System Solutions



Application Flexibility

- Optional photovoltaic modules to supplement energy storage and reduce line losses;
- Energy storage capacity can be flexibly configured according to on-site working conditions.

Voltage Governance

- Stabilize the grid voltage at a set value to ensure the normal operation of power-using equipment;
- Intelligent fan redundancy cooling, low temperature rise, long service life;
- Particularly effective for stations with large load fluctuations.

Convenient installation

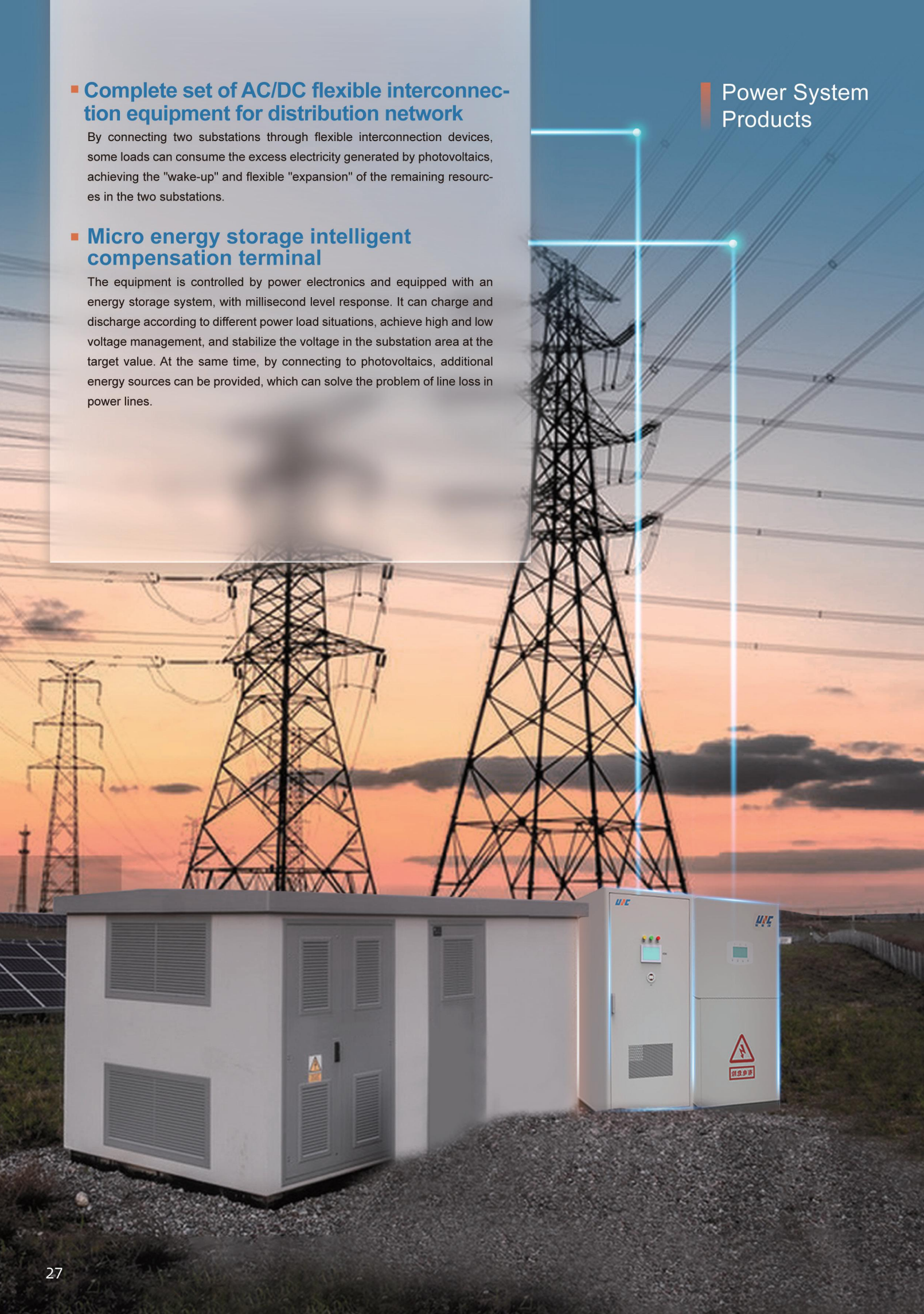
- Installation and commissioning of equipment can be completed within 2 hours;
- IP65 protection class, low installation site requirements.

Complete set of AC/DC flexible interconnection equipment for distribution network

By connecting two substations through flexible interconnection devices, some loads can consume the excess electricity generated by photovoltaics, achieving the "wake-up" and flexible "expansion" of the remaining resources in the two substations.

Micro energy storage intelligent compensation terminal

The equipment is controlled by power electronics and equipped with an energy storage system, with millisecond level response. It can charge and discharge according to different power load situations, achieve high and low voltage management, and stabilize the voltage in the substation area at the target value. At the same time, by connecting to photovoltaics, additional energy sources can be provided, which can solve the problem of line loss in power lines.



Complete set of AC/DC flexible inter connection equipment for distribution network

- Targeting load balancing and heavy load transfer, power regulation is carried out to achieve flexible DC interconnection in the low-voltage platform area
- It can achieve low-voltage load transfer in the substation area and improve the reliability of power supply in the substation area
- Build a DC distribution network with a DC bus, achieve load clustering through the DC distribution network, and reduce the number of transformation links
- It has protection functions such as voltage protection, overcurrent protection, over temperature protection, and lightning protection to ensure the safe and stable operation of the equipment

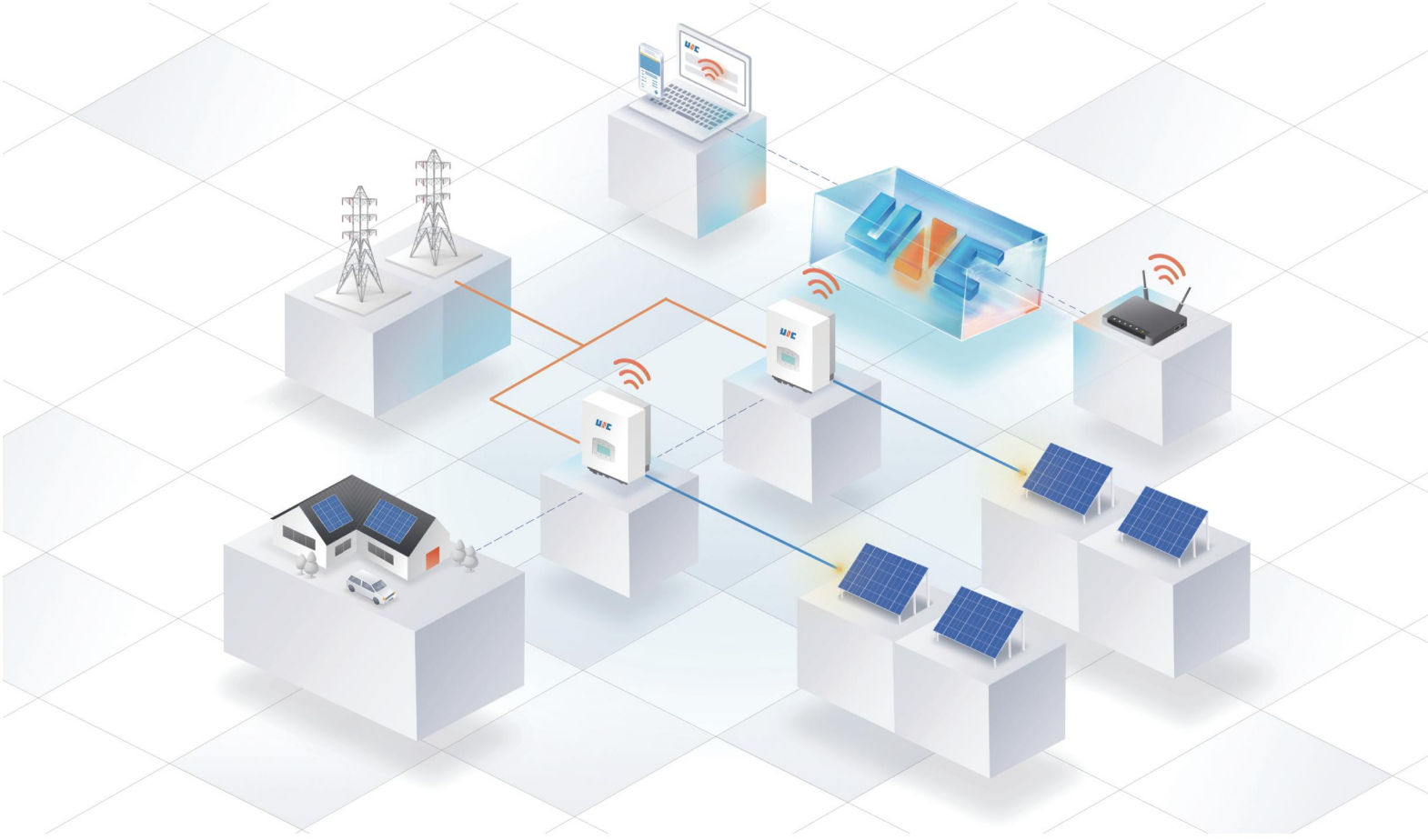
Product Model	UNC-FIADA-500-500	UNC-FIADA-250-250
Alternating current side		
Rated power (kVA)	500	250
Wiring mode	Three-phase three-wire, non-isolated	
Output overload capacity (kW)	1.1Times 10min, 1.2 times 60s	
Allowable grid voltage (Vac)	400V ± 15%	
Allowable grid frequency (Hz)	50/60 ± 2.5Hz	
Total current harmonic distortion	≤3% (rated power)	
Ripple factor of voltage	≤1% (off-grid linear load)	
Power factor	0.9 Leading~0.9 lagging, continuously adjustable	
DC side		
Rated DC power (kW)	500	250
DC voltage output range (Vdc)	Rated voltage 750Vdc (600~850)	
Maximum output current (A)	916	550
Voltage stabilization accuracy	≤ ± 1%	
Current stabilization accuracy	≤ ± 3% (rated power)	
System parameter		
Dimension (W x H x D mm)	2200*2200*1400	2000*2200*1400
Weight (kg)	2600	1800
Protection class	IP54	
Allowable ambient temperature(℃)	-25~60(>45℃ for derating)	
Cooling mode	Air cooled	
Allowable relative humidity	0~95% (without condensation)	
Allowable altitude above sea level	3000m(>2000m for derating)	
Emergency stop(ESD)	Yes	
Display and communication		
Display	Touch screen	
Communication interface	ModBusTCP/RTU，CAN2.0	
Control power supply	AC/DC power supply	

Micro energy storage intelligent compensation terminal

- Voltage management can stabilize the terminal voltage at 220V
- Flexible energy storage configuration, which can flexibly adjust energy
- Short construction period. Complete construction within 2 hours to quickly solve problems
- High protection design, IP65 protection, extended service life
- High reliability design, overload protection, overcurrent, and multiple short circuit protection
- Remote maintenance, supporting remote monitoring and local monitoring operations

Product Model	ESS1-6K1P-02-LV
Parameters at AC side	
Maximum allowable input power	8kW
Maximum input voltage	580V
MPPT voltage rang	90-520V
Maximum input current	15A/15A
Number of MPPT	2
Battery parameters	
Type of battery	lithium battery
Battery capacity	5kWh * 2 sets
Battery voltagerange	42-58V
Maximum charge and discharge power	5kW
Maximum charge and discharge current	120A
Alternating current parameter	
Ratedpower	6kW
Rated voltage/power	L/N/PE 220V 50Hz
Power factor	0.8 Leading - 0.8 lagging
Total currentharmonic distortion	< 3%
Basic parameters	
Dimensions (W * H * T)	568mm*1146mm*340mm
Cooling mode	Natural cooling
Weight (without battery)	5-6kg
Protection class	IP65
Service ambient temperature	-25~+60℃(>45 ℃ derating)
Maximum altitude above sea level	3000m
Mode of communication	RS485/WIFI/GPRS

Photovoltaic System Solutions



Efficient power generation

- Multiple MPPT design, load application working conditions to enhance power generation;
- DC side supports 150% overmatching;
- Low starting voltage and long power generation time;
- Supports nighttime PID repair to enhance power generation.

Safe and reliable

- IP66 waterproof and dustproof;
- Intelligent fan redundancy cooling, low temperature rise, long service life;
- Optional AFCI DC arc safeguard protection function, safer;
- The core components are selected from the world's well-known brands.

Friendly and convenient

- Failure warning only, active operation and maintenance to save energy and effort;
- APP rapid website building, one-click minimalist design;
- Multiple communication modes, flexible network operation.

Three Phase Photovoltaic Inverter

Photovoltaic inverter is a device that converts direct current (DC) generated by photovoltaic solar panels into alternating current (AC), and is one of the core components of photovoltaic power generation systems.

To adapt to various application scenarios, our company has developed photovoltaic inverters with different power levels.

Three Phase Photovoltaic Inverter(10-25K)

- Maximum efficiency of 98.5%
- Adaptive complex power grid
- MPPT current of 32A, suitable for high-power components
- Intelligent remote monitoring and maintenance to improve operational efficiency
- IP66 high protection level
- Support anti backflow control

Product Model	RSI-10K3P	RSI-12K3P	RSI-13K3P	RSI-15K3P	RSI-17K3P	RSI-20K3P	RSI-23K3P	RSI-25K3P
DC input								
Maximum allowable input power	12kW	14.5kW	15.6kW	18kW	20.4kW	24kW	27.6kW	30kW
Maximum input voltage	1000V							
Rated input voltage	600V							
Starting voltage	180V							
MPPT voltage range	16-900V							
Maximum input current	16A/16A							
Maximum short circuit current	25A/25A							
Number of MPPT/maximum number of PV string	2/2							
Alternating current output								
Rated output power	10kW	12kW	13kW	15kW	17kW	20kW	23kW	25kW
Maximum apparentpower	11kVA	13.2kVA	14.3kVA	16.5kVA	18.7kVA	22kVA	25.3kVA	27.5kVA
Maximum activepower	11kVA	13.2kVA	14.3kVA	16.5kVA	18.7kVA	22kVA	25.3kVA	27.5kVA
Rated output current	15.2A	18.2A	19.8A	22.8A	25.8A	30.4A	34.9A	38.0A
Maximum output current	16.7A	20.1A	21.7A	25.1A	28.4A	33.5A	38.4A	41.8A
Ratedgrid voltage	3L/N/PE,220/380V							
Ratedgrid frequency	50Hz							
Power factor	>0.99 (0.8 leading ~ 0.8 lagging)							
Totalvoltage harmonic distortion	<3% rated power							
Efficiency								
Maximum efficiency	98.30%		98.40%		98.50%			
Efficiencyin China	97.60%		97.70%		97.90%			
Protect								
InputDC switch	have							
Anti-islandprotection	have							
Output overcurrentprotection	have							
Output short circuitprotection	have							
DC reverse connection protection	have							
Protection against surge	have							
Insulation impedance detection	have							
Temperature protection	have							
DC arc fault protection	have							
Basic parameters								
Dimensions (W * H * T)	406mmx468mmx198mm							
Weight	20kg				22kg			
Protection class	IP66							
Mode of isolation	Without transformer							
Self-consumption atnight	<1W							
Cooling mode	Natural cooling				Intelligent redundant air cooling			
Operating temperature/ humidity	-25~+60℃/0~100%							
Maximum altitude above sea level	3000m							
Grid connection standard	NB/T 32004							
Safety Regulations/EMC Standards	IEC 62109-1/-2,IEC 61000-6-1/-2/-3/-4,NB/T 32004							
Display&Communication								
Display	Bluetooth&LED indicator, LCD display (optional)							
Mode of communication	RS485, WIFI (optional), GPRS (optional)							

Three Phase Photovoltaic Inverter(30-60K)

- IP66 high protection level
- Quick plug terminal design, simple and fast wiring
- OTA online firmware remote upgrade, worry free system updates
- Built in PID repair function to improve component power generation performance
- 40A Maximum MPPT current of 40A, suitable for high-power and double-sided components

Product Model	TSI-30K3P-03-CN	TSI-33K3P-03-CN	TSI-36K3P-03-CN	TSI-40K3P-03-CN	TSI-50K3P-03-CN	TSI-60K3P-03-CN
DC input						
Maximum allowable input power	45kW	49.5kW	54kW	60kW	70kW	80kW
Maximum input voltage	1100V					
Rated input voltage	620V					
Starting voltage	250V					
MPPT voltage range	200-1000V					
Maximum input current	32A*3				32/32/32/40A	32/32/32/40A
Maximum short circuit current	50A*3				50A*4	50A*5
Number of MPPT/maximum number of PV string	3/6				4/8	5/10
Alternating current output						
Rated output power	30kW	33kW	36kW	40kW	50kW	60kW
Maximum apparent power	33kVA	36.3kVA	39.6kVA	44kVA	55kVA	66kVA
Maximum active power	33kW	36.3kW	39.6kW	44kW	55kW	66kW
Rated output current	45.6A	50.1A	54.7A	60.8A	72.5A	85.9A
Maximum output current	50.2A	55.1A	60.2A	66.9A	79.7A	95.6A
Rated grid voltage	3L/N/PE, 400V (voltage range 320V~480V)					
Rated grid frequency	50Hz (allowable frequency range 45~55Hz)					
Power factor	>0.99 (0.8 lead~0.8 lag)					
Total voltage harmonic distortion	<3% rated power					
Efficiency						
Maximum efficiency	98.60%		98.40%		98.50%	
Efficiency in China	98.00%		97.70%		97.90%	
Protect						
Leakage current protection	have					
Anti-island protection	have					
DC reverse connection protection	have					
AC short circuit protection	have					
DC switch	have					
Lightning protection	Class II AC/Class II DC					
Insulation impedance detection	have					
Overvoltage level	Class II AC/Class II DC					
Basic parameters						
Dimensions (W * H * T)	585mmx490mmx260mm				675mmx590mmx275mm	
Weight	32kg				50kg	
Protection class	IP66					
Mode of isolation	Without transformer					
Self-consumption at night	<1W					
Cooling mode	Intelligent air cooling					
Operating temperature/humidity	-25~+60℃/0~100% (non-condensing)					
Safety Regulations/EMC Standards	4000m					
Grid connection standard	NB/T 32004					
Safety Regulations/EMC Standards	IEC 62109-1/-2,IEC 61000-6-1/-2/-3/-4,NB/T 32004					
Display&Communication						
Display	LED+APP					
Mode of communication	RS485/4G					

Three Phase Photovoltaic Inverter(80-110K)

- Maximum efficiency of 98.7%, ultra-low starting voltage, ultra wide voltage range
- Support intelligent detection of DC arc pulling (optional)
- Supports 1.5 times DC super matching, compatible with up to 20A high current components
- Possess adaptability to weak current networks
- High protection level IP66, intelligent air cooling, low noise
- One frequency modulation, multiple operating modes such as P-F, Q-U, etc

Product Model	MDS-80K3P-08-CN	MDS-100K3P-10-CN	MDS-110K3P-10-CN
DC input			
Maximum allowable input power	120kW	150kW	165kW
Maximum input voltage		1100V	
Starting voltage		180V	
Rated input voltage		580V	
MPPT voltage range		200V~1000V	
Number of MPPT	8	8	8
Maximum number of PV string	2	2	2
Maximum input current	40A*4+32A*4	40A*4+32A*4	40A*4+32A*4
Maximum short circuit current	50A*8	50A*8	50A*8
AC output			
Rated output power	80kW	100kW	110kW
Maximum apparent power	88kVA	110kVA	121kVA
Maximum output current	3*128A	3*160A	3*176A
Rated grid voltage		3/N/PE,400V	
Voltage range of power grid		300V～480V	
Rated grid frequency		50Hz	
Grid frequency range		45Hz～55Hz	
Power factor		>0.99（0.8 超前～0.8 滞后）	
THDi		<3%	
DC Component		<0.5%	
Efficiency			
Maximum efficiency		98.7%	
Efficiency in Europe		98.1%	
Efficiency in China		98.1%	
Safety protection			
DC reverse protection		Available	
Communication short circuit protection		Available	
AC output overcurrent		Available	
Over Voltage Protection		Available	
Insulation impedance protection		Available	
Residual current (RCD)		Available	
Surge protection		Level II lightning protection	
Island protection		Available	
Temperature protection		Available	
DC Switching		Available	
String Detection		Standard	
Integrated AFCI Protection		Optional	
PID repair		Optional	
Basic parameters			
Dimensions		1200mm*535mm*275mm	
Weight	65kg	73kg	82kg
Isolation Method		transformerless	
Self-consumption at night		IP66	
Temperature		<1W	
Humidity		-30℃~60℃	
Noise level		0~100%	
Cooling method		<70dB	
Maximum working altitude		4000m(>2000m derating)	
Display		LED	
Communication method (standard)		RS485	
Communication method (optional)		4G/WIFI/PLC	
Conforms to standard		CNCA/CTS0002-2014,NB/T 32004-2018	

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