

OSEP

Residential PV Inverter

Powering a Green Future

OSEP

HEADQUARTERS

Add: Room 117, 1st Floor, Building 4, No. 35, Lane 2216, Jingao Road,
China (Shanghai) Pilot Free Trade Zone

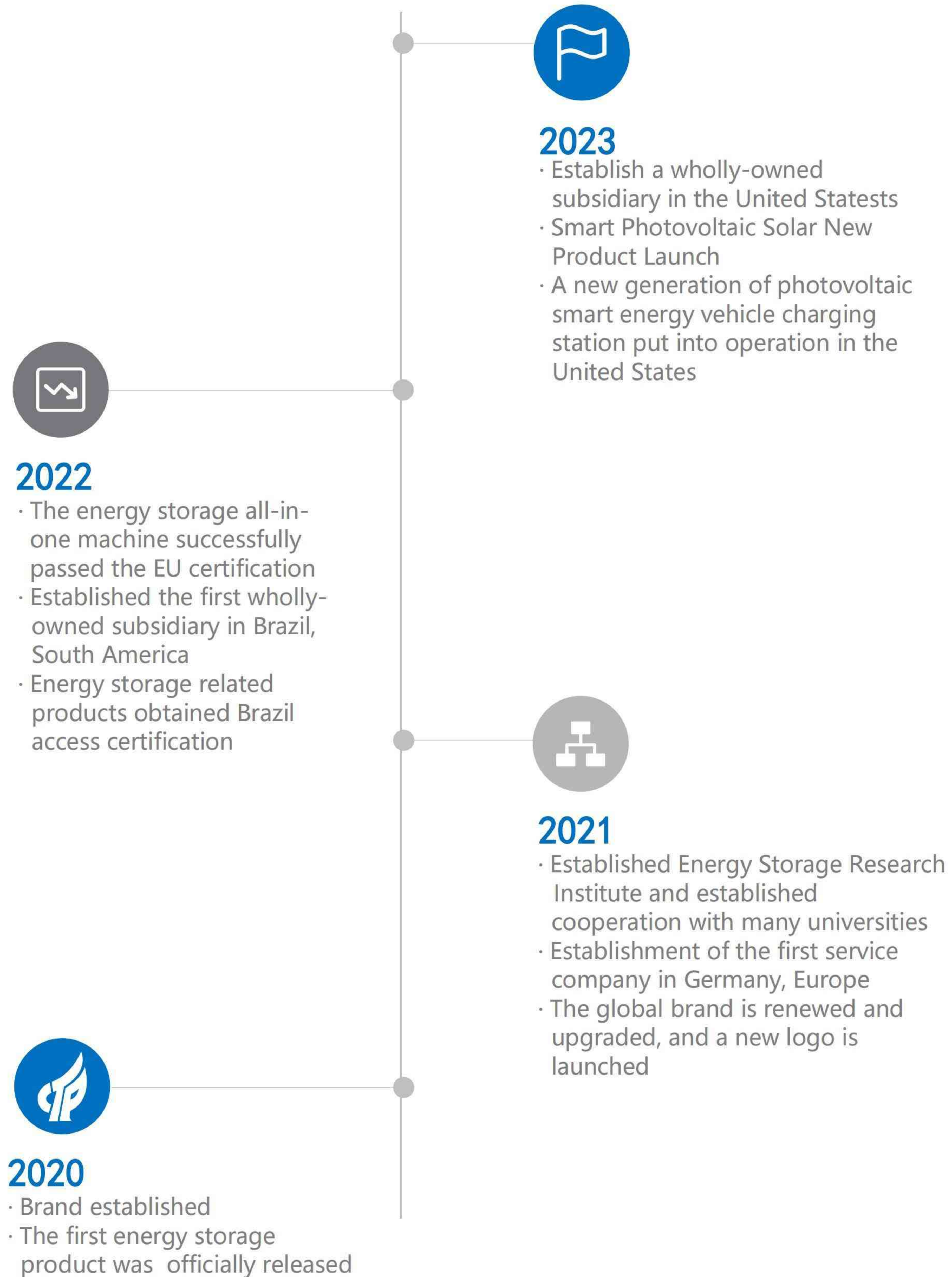
Website: www.osep.com.cn E-mail: osep@bonroy.group

2023

www.osep.com.cn

Over 29 Years Of Experience From Industry To Residential





► TECHNOLOGY, INNOVATION AND THE HISTORICAL INDUSTRIAL EXPERIENCE OF KSTAR FROM TODAY AVAILABLE FOR EVERY HOME

Shanghai Osep Energy Technology Co., Ltd., funded by Bairun Group and headquartered in Pudong New Area, Shanghai, is a high-tech enterprise with independent intellectual property rights, committed to building new energy application technology as the core and integrating independent research and development, production, sales and service.

Main products and services include intelligent photovoltaic power generation system, photovoltaic grid-connected inverter, photovoltaic energy storage inverter, optical storage integrated machine, household energy storage battery, electric vehicle charging pile, intelligent data collector and SEMS intelligent energy management system.

► In the future

Osep Energy will combine new technologies such as photovoltaic power generation, energy storage, intelligent distribution and transmission and intelligent energy use through scientific and technological innovation to build an integrated solution for the energy Internet of Things, and combine optical energy, energy storage, hydrogen energy with intelligent technologies such as the Internet and big data to build an intelligent low-carbon or even carbon-free new energy system.

OSEP BluE Power Your Green Life



One Stop Solution Compatible with any type of Demand

- ▶ Our BluE series covers single phase 1 to 6kw, three phase 3-25kw and up to 20kwh Energy Storage System. This range is predominantly designed for modern house and small commercial energy demands.
- ▶ One App to monitor your power flow for different systems;
- ▶ One Call for pre-sales training & after-sales service;

Better O&M Experience

New Generation Residential PV Inverter

- Higher Efficiency
- Dual MPPT
- Remote Control
- VPP Ready
- IP65 Protection Degree
- Type II DC SPD
- CATL Battery Cell
- Fanless Design & Lighter





BluE-G

Residential Inverter

Range From 1-25KW



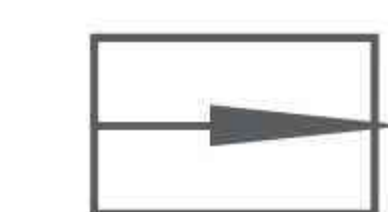
Higher Efficiency



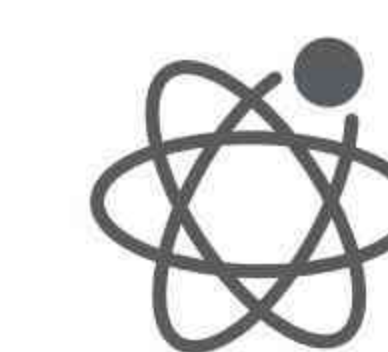
DC/AC Ratio Up to 2



Convenient & Light



Type II SPD



LVRT/HVRT Ability



API / VPP Ready

BLuE ESS

ALL-IN-ONE SOLUTION

Application of energy storage system

Powered by CATL

Lithium Ion batteries have received some negative press in recent years for their use of nickel and cobalt which are mined in countries with a poor record workers rights and use of child labour. There is currently a race to remove these materials from other manufacturers batteries worldwide. The CATL battery has already stopped using these materials and has moved to an LFP chemistry which has 0% cobalt or nickel. This same chemistry is being used in the Tesla Model 3 being supplied to China and EU.

ALL-IN-ONE

The BLuE ESS includes all the components needed to transform the energy produced by PV panels into usable energy for household consumption or to store it in the integrated battery and use it in the moment of real world.



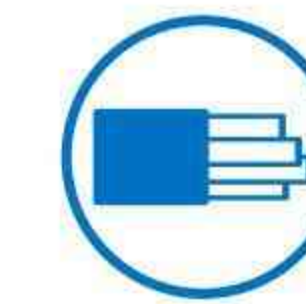
TOP PERFORMANCES

Maximum efficiency of energy conversion.

Storage capacity up to 20 kwh



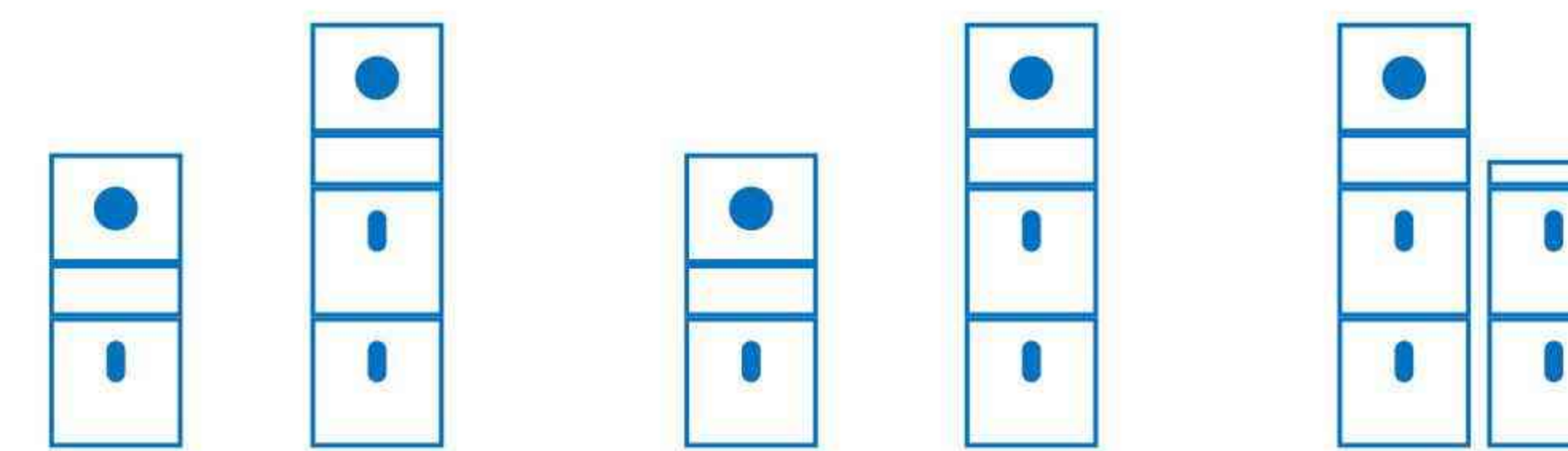
BluE-S Hybrid Inverter



"Plug and Play" - Cable Box



BluE-PACK 5.1

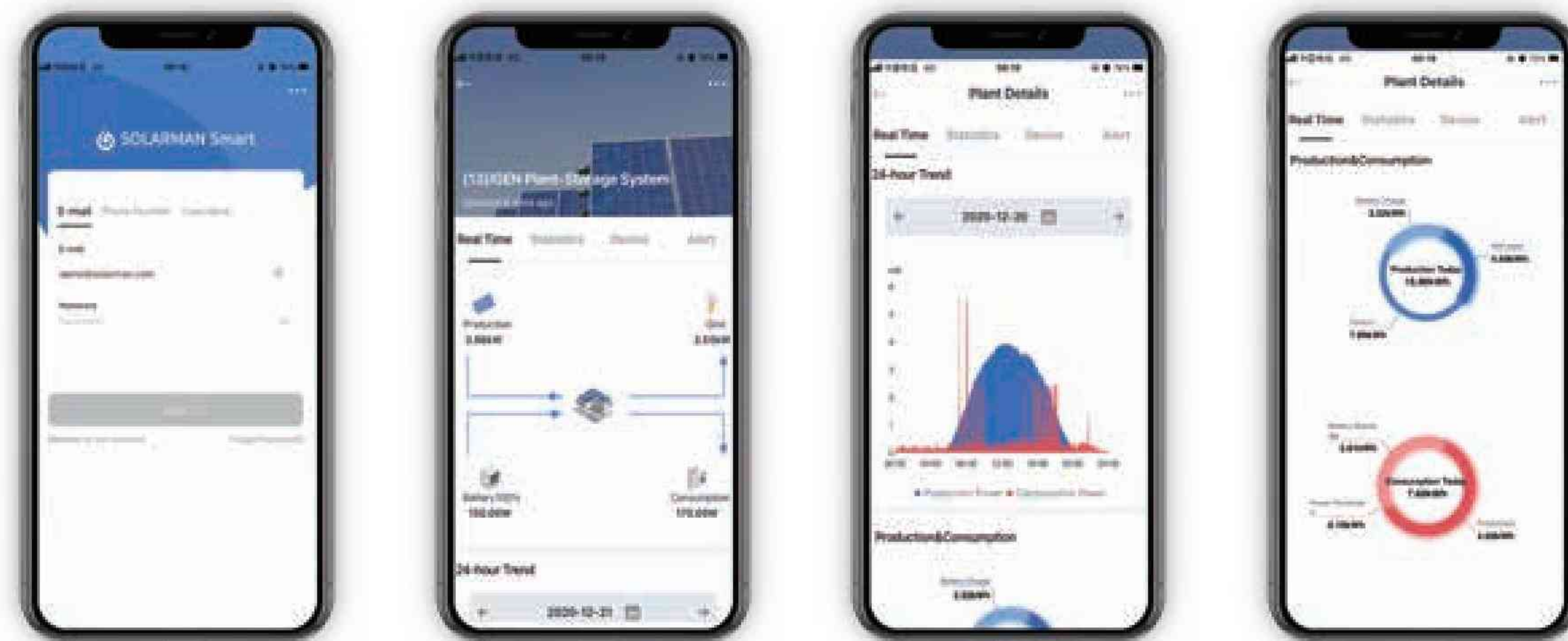


3,68 kW 5,1 kWh	3,68 kW 10,2 kWh	5,0 kW 5,1 kWh	5,0 kW 10,2 kWh	5,0 kW 20,4 kWh
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Energy Management System

Intelligent energy on your hands

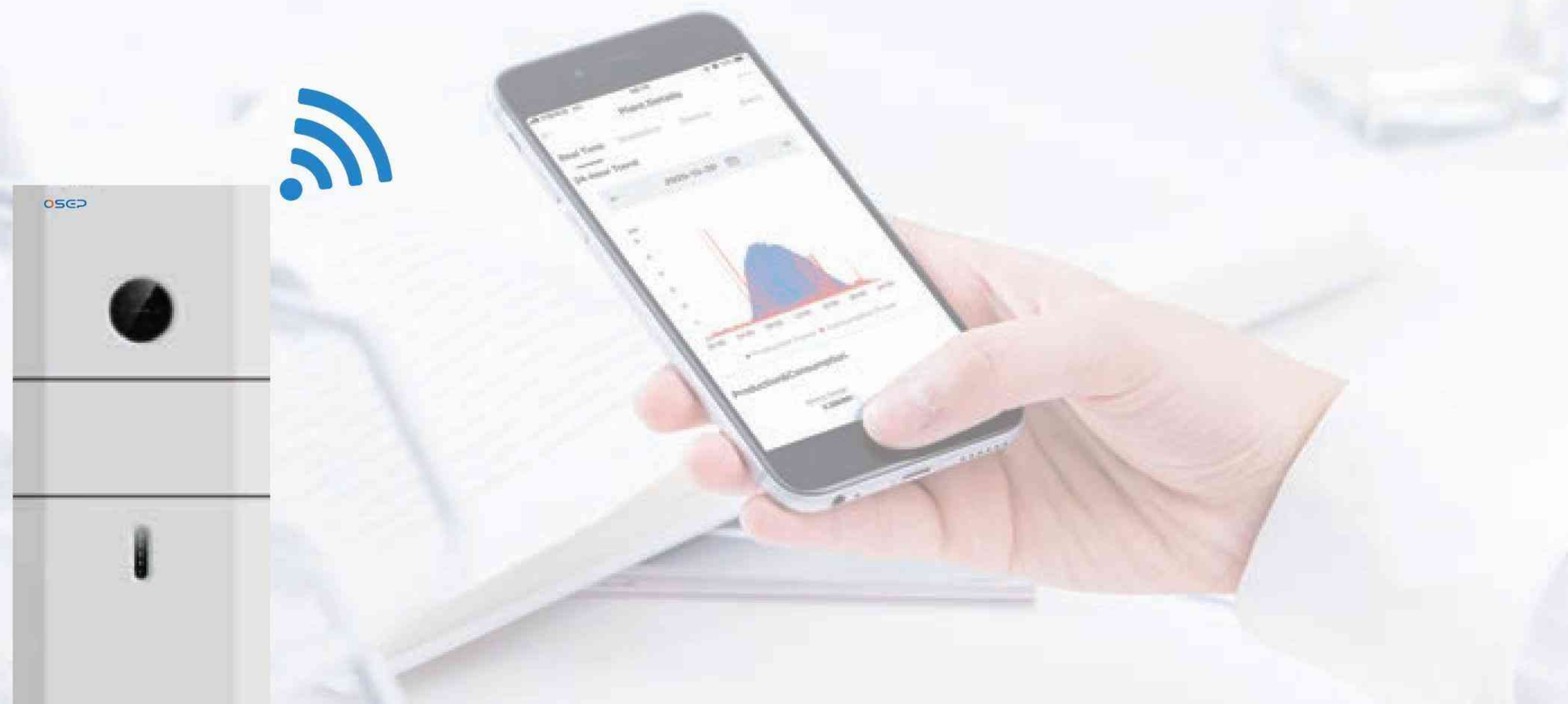


SOLARMAN Smart home system with APP Remote access to the system

With the app you can monitor production and energy consumption of your home in real time. Set your preferences to optimize your energy independence, the protection against blackouts or energy savings.

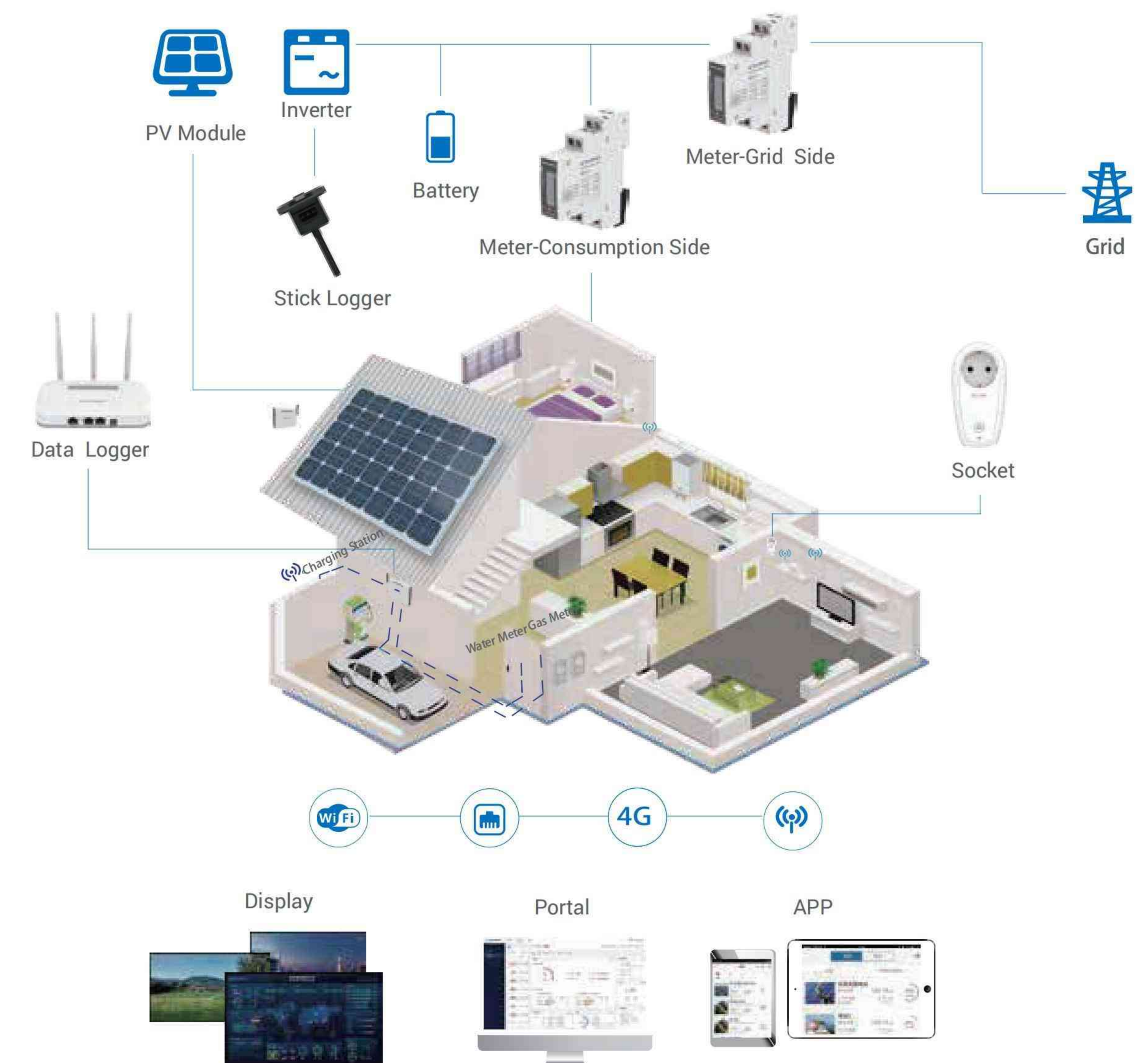


Thanks to instant alerts and access to distance, you can control your plant wherever you are.



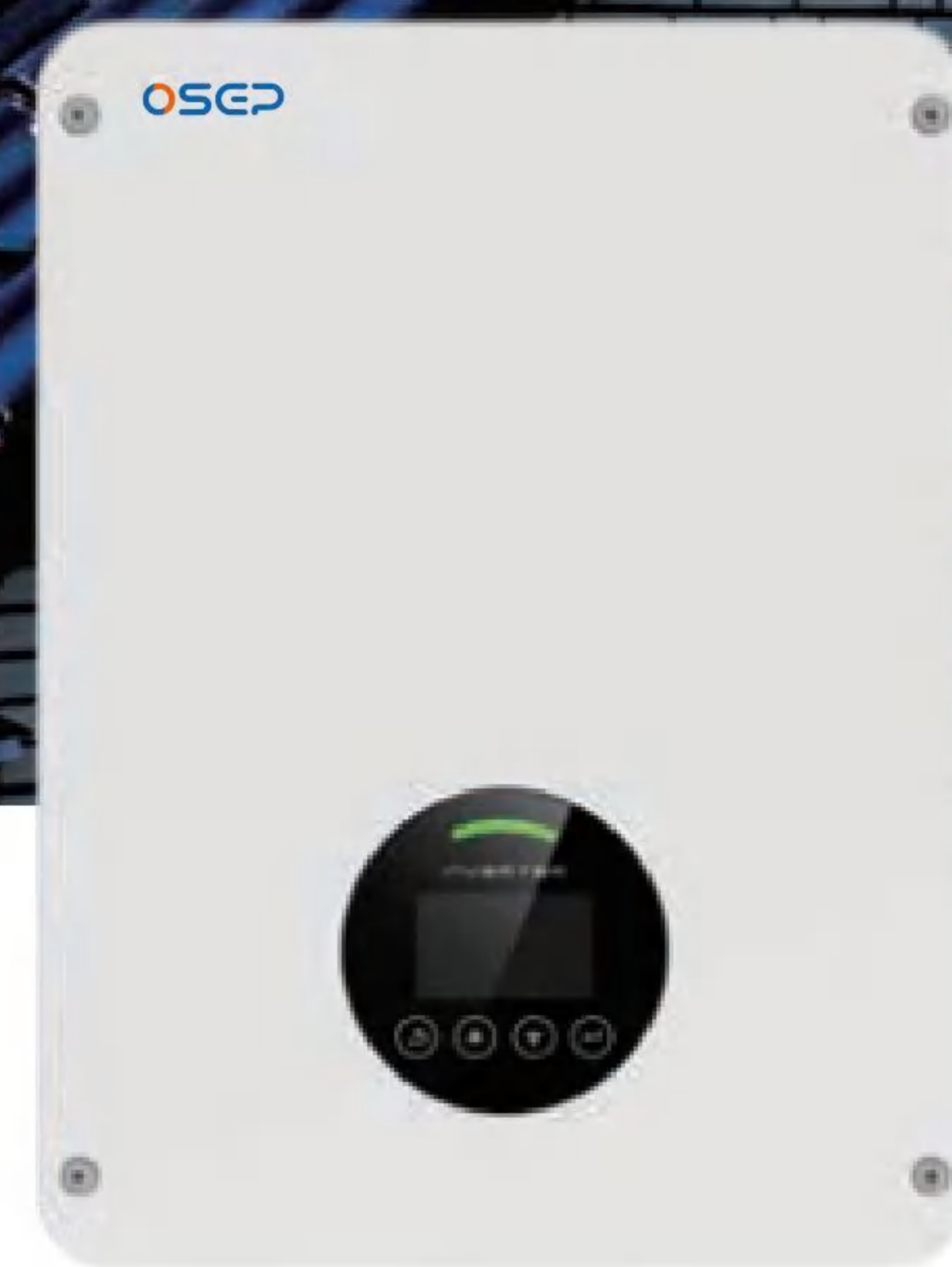
Step Up Modern House Energy Supply

- ▶ Supply your home appliances fully automated.
- ▶ 100% Independence from grid with battery system.
- ▶ Manage the whole system via APP anytime or anywhere.
- ▶ Join the Energy Future-Virtual Power Plant.



BluE-G SINGLE PHASE SERIES

BluE-G 1000S / BluE-G 1500S /
BluE-G 2000S / BluE-G 3000S



PV On-Grid String Inverter

- 

Max. PV voltage up to 600V
DC/AC ratio up to 1.5
- 

Compatible for big capacity PV panel
WiFi / 4G Plug optional
- 

Type II DC SPD/Type III AC SPD
IP65 protection
- 

High efficiency up to 97.6%
Smaller and lighter

MODEL	BluE-G 1000S	BluE-G 1500S	BluE-G 2000S	BluE-G 3000S
Input(DC)				
Max. DC Voltage	600Vdc	600Vdc	600Vdc	600Vdc
Nominal Voltage	380Vdc	380Vdc	380Vdc	380Vdc
Start Voltage	60V	80V	80V	80V
MPPT Voltage Range	60V-560V	80V-560V	80V-560V	80V-560V
Number of MPP Tracker	1	1	1	1
Strings Per MPP Tracker	1	1	1	1
Max. input Current Per MPPT	13A	13A	13A	13A
Max. Short-circuit Current Per MPPT	15.6A	15.6A	15.6A	15.6A
Output(AC)				
Nominal AC Output Power	1000W	1500W	2000W	3000W
Max. AC Apparent Power	1100VA	1650VA	2200VA	3300VA
Nominal AC Voltage	230V L-N	230V L-N	230V L-N	230V L-N
AC Grid Frequency Range	50Hz / 60Hz±5Hz	50Hz / 60Hz±5Hz	50Hz / 60Hz±5Hz	50Hz / 60Hz±5Hz
Max. Output Current (A)	4.8A	7.2A	9.6A	14.4A
Power Factor (cosΦ)	0.8 leading to 0.8 lagging			
THDi	<3%			
Efficiency				
Max. Efficiency	97.00%	97.50%	97.50%	97.60%
Euro Efficiency	96.50%	97.00%	97.00%	97.00%
Protection devices				
DC Switch	Yes	Yes	Yes	Yes
Anti-islanding Protection	Yes	Yes	Yes	Yes
Output Over Current	Yes	Yes	Yes	Yes
DC Reverse Polarity Protection	Yes	Yes	Yes	Yes
String Fault Detection	Yes	Yes	Yes	Yes
Surge Protection	DC Type II;AC Type III			
Insulation Detection	Yes	Yes	Yes	Yes
AC Short Circuit Protection	Yes	Yes	Yes	Yes
General Specifications				
Dimensions W x H x D	350*290*120mm			
Weight	7.3kg	8kg	8kg	8kg
Environment				
Operating Temperature Range	-25°C~+60°C			
Cooling Type	Natural			
Max. Operation Altitude	4000m			
Max. Operation Humidity	0-100%			
AC Output Terminal Type	Quick Connector			
IP Class	IP65			
Topology	Transformer-less			
Communication Interface	RS485/WIFI/4G			
Display	LCD			
Certification & Standard	EN/IEC62109-1/2 ; IEC/EN61000-6-2;IEC/EN61000-6-4;IEC62116;IEC61727;EN50549-1			

*Specifications subject to change without prior notice.

BluE-G SINGLE PHASE SERIES

BluE-G 3600D / BluE-G 4000D / BluE-G 4200D
BluE-G 4600D / BluE-G 5000D
BluE-G 6000D



PV On-Grid String Inverter



Max. PV voltage up to 600V
DC/AC ratio up to 1.5



Compatible for big capacity PV panel
WiFi / 4G Plug optional



Type II DC SPD/Type III AC SPD
IP65 protection



High efficiency up to 98.3%
Smaller and lighter



MODEL	BluE-G 3600D	BluE-G 4000D	BluE-G 4200D	BluE-G 4600D	BluE-G 5000D	BluE-G 6000D
Input(DC)						
Max. DC Voltage	600V	600V	600V	600V	600V	600V
Nominal Voltage	380V	380V	380V	380V	380V	380V
Start Voltage	100V	100V	100V	100V	100V	100V
MPPT Voltage Range	80V-560V	80V-560V	80V-560V	80V-560V	80V-560V	80V-560V
Number of MPP Tracker	2	2	2	2	2	2
Strings Per MPP Tracker	1	1	1	1	1	1
Max. Input Current Per MPPT	15A	15A	15A	15A	15A	15A
Max. Short-circuit Current Per MPPT	18A	18A	18A	18A	18A	18A
Output(AC)						
Nominal AC Output Power	3600W	4000W	4200W	4600W	5000W ¹	6000W
Max. AC Apparent Power	3960VA ²	4400VA	4620VA	5060VA ³	5500VA ⁴	6000VA
Nominal AC Voltage	230V L-N	230V L-N	230V L-N	230V L-N	230V L-N	230V L-N
AC Grid Frequency Range	50Hz / 60Hz±5Hz					
Max. Output Current	17A ⁵	19A	20A	22A ⁶	24A ⁷	26A
Power Factor(cosΦ)	0.8 leading ~ 0.8 lagging					
THDi	<3%					
Efficiency						
Max. Efficiency	98.1%	98.3%	98.3%	98.3%	98.3%	98.3%
Euro Efficiency	97.7%	97.9%	97.9%	97.9%	97.9%	97.9%
Protection devices						
DC Switch	Yes	Yes	Yes	Yes	Yes	Yes
Anti-islanding Protection	Yes	Yes	Yes	Yes	Yes	Yes
Output Over Current	Yes	Yes	Yes	Yes	Yes	Yes
DC Reverse Polarity Protection	Yes	Yes	Yes	Yes	Yes	Yes
String Fault Detection	Yes	Yes	Yes	Yes	Yes	Yes
Surge Protection	DC: Type II / AC: Type III					
Insulation Detection	Yes	Yes	Yes	Yes	Yes	Yes
AC Short Circuit Protection	Yes	Yes	Yes	Yes	Yes	Yes
General Specifications						
Dimensions W x H x D	380X380X150mm					
Weight	10kg	11kg	11kg	11kg	11kg	11kg
Operating Temperature Range	-25°C~+60°C					
Cooling Type	Natural					
Max. Operation Altitude	≤4000m					
Max. Operation Humidity	0-100%					
AC Output Terminal Type	Quick Connector					
IP Class	IP65					
Topology	Transformer less					
Communication	RS485/WIFI/4G					
Display	LCD					
Certification & Standard	EN/IEC62109-1/2 ; IEC/EN61000-6-2;IEC/EN61000-6-4;IEC61683;IEC60068;IEC60529;IEC62116; IEC61727;EN50549-1;AS 4777.2;NRS 097;VDE-AR-N-4105;VDE 0126-1-1;CEI0-21;G98;G99;C10/C11;TED749; UNE217001;UNE217002;NB/T32004-2018 ; GB/T19964-2012;INMETRO					

*1. Nominal AC output power is 4999W for Australia and 4600W for Germany and South Africa.

*2. Max. AC apparent power is 3680VA for the UK.

*3. Max. AC apparent power is 5000VA for Belgium and is 4600VA for Germany and South Africa.

*4. Max. AC apparent power is 4999VA for Australia, 5000VA for Belgium and 4600VA for Germany and South Africa.

*5. Maximum output current is 16A for England.

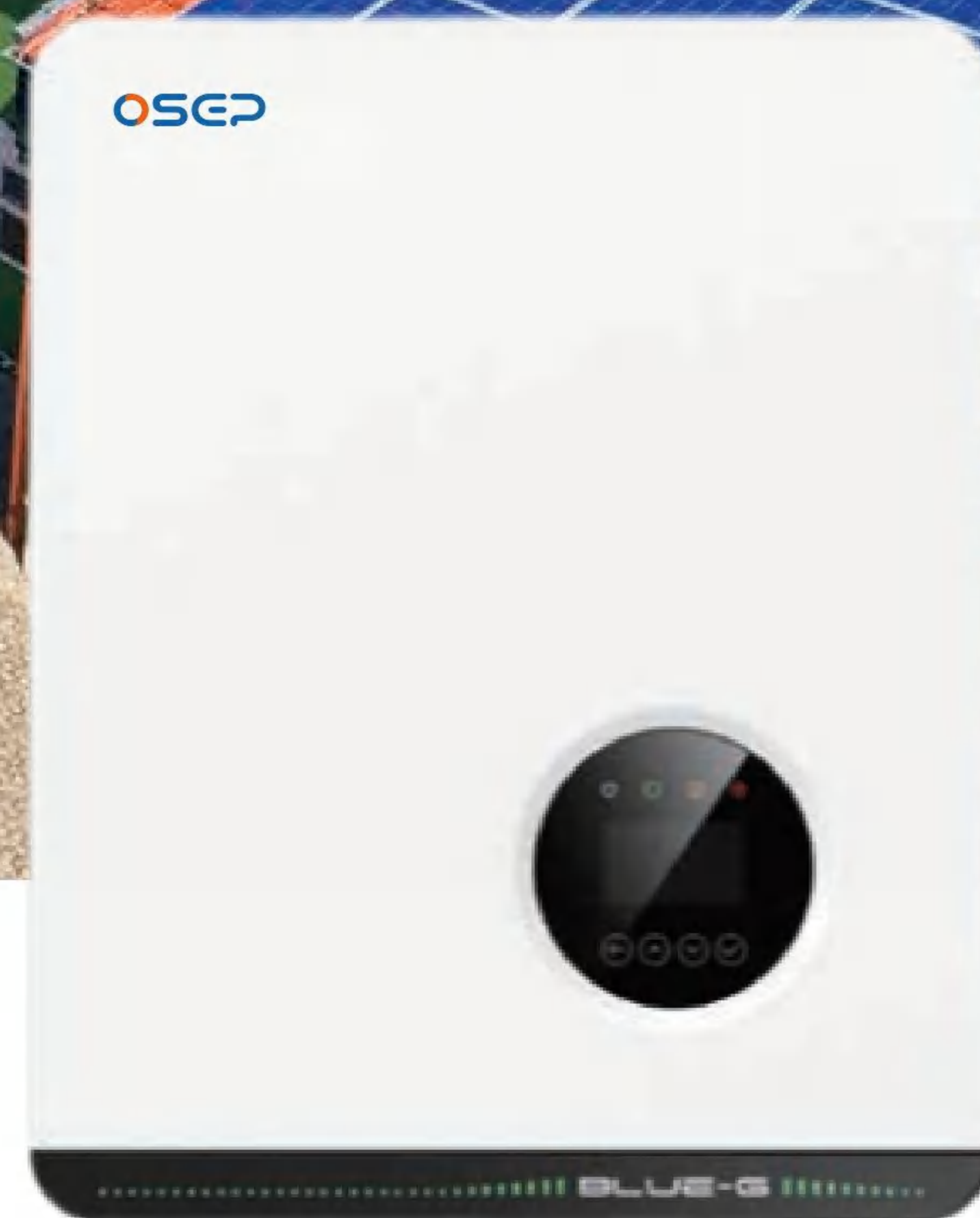
*6. Maximum output current is 21.7A for Australia and 20A for Germany and South Africa.

*7. Maximum output current is 21.7A for Australia and 20A for Germany and South Africa.



BLUE-G THREE PHASE SERIES

BluE-3K / BluE-4K / BluE-5K /
BluE-6K / BluE-8K / BluE-10K / BluE-12K



PV On-Grid String Inverter



Max. PV voltage up to 1100V
Type II DC /AC SPD



Compatible for big capacity PV panel
WiFi / 4G Plug optional



DC/AC ratio up to 2
IP66 protection



High efficiency up to 98.6%
Smaller and lighter

MODEL	BluE-3KT	BluE-4KT	BluE-5KT	BluE-6KT	BluE-8KT	BluE-10KT	BluE-12KT
Input(DC)							
Max. DC Voltage	1100V	1100V	1100V	1100V	1100V	1100V	1100V
Nominal Voltage	620V	620V	620V	620V	620V	620V	620V
Start Voltage	180V	180V	180V	180V	180V	180V	180V
MPPT Voltage Range	140 V~1,000 V	140 V~1,000 V	140 V~1,000 V	140 V~1,000 V	140 V~1,000 V	140 V~1,000 V	140 V~1,000 V
Number of MPP Tracker	2	2	2	2	2	2	2
Strings Per MPP Tracker	1	1	1	1	1	1	1
Max. Input Current Per MPPT	15A	15A	15A	15A	15A	15A	15A
Max. Short-circuit Current Per MPPT	20A	20A	20A	20A	20A	20A	20A
Output(AC)							
Nominal AC Output Power	3000W	4000W	5000W	6000W	8000W	10000W	12000W
Maximum AC Output Power	3300VA	4400VA	5500VA	6600VA	8800VA	11000VA	13200VA
Nominal AC Voltage	400V 3L+N						
AC Grid Frequency Range	50 / 60Hz(±5Hz)						
Maximum Output Current	4.8A	6.4A	8.0A	9.6A	12.8A	16.0A	19.2A
Power Factor(Φ)	0.8leading-0.8lagging						
THDi	3%						
Efficiency							
Max. Efficiency	98.4%	98.4%	98.4%	98.4%	98.6%	98.6%	98.6%
Euro Efficiency	97.5%	97.5%	97.5%	97.5%	98.0%	98.1%	98.1%
Protection devices							
DC Switch	Yes						
Output Over Current	Yes						
Anti-islanding Protection	Yes						
DC Reverse Polarity Protection	Yes						
String Fault Detection	Yes						
AC/DC Surge Protection	DC: Type II / AC: Type III / Type II Optional						
Insulation Detection	Yes						
AC Short Circuit Protection	Yes						
General Specifications							
Dimensions W x H x D	380x483x161mm						
Weight	<17kg						
Operating Temperature Range	-25°C~+60°C						
Cooling Type	Natural cooling						
Max. Operation Altitude	4000m						
Max. Operation Humidity	0-100%(No condensation)						
AC Output Terminal Type	Connector						
IP Class	IP66						
Topology	Transformer-less						
Communication	RS485/Wifi/4G						
Display	LCD						
Certification & Standard	EN/IEC62109-1/2 ; IEC/EN61000-6-2;IEC/EN61000-6-4;IEC61683;IEC60068;IEC60529;IEC62116;IEC61727; EN50549-1;AS 4777.2;VDE-AR-N-4105;VDE 0126-1-1;CEI0-21;G98;G99;C10/C11;NB/T32004-2018 ; GB/T19964-2012						

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BLUE-G THREE PHASE LV SERIES


Blue-12KTL / Blue-15KTL / Blue-20KTL




PV On-Grid String Inverter

 Max. PV voltage up to 800V
Type II DC /AC SPD

 Reactive power control
WiFi / 4G Plug optional

 DC/AC ratio up to 2
IP66 protection

 High efficiency up to 98.6%
Smaller and lighter

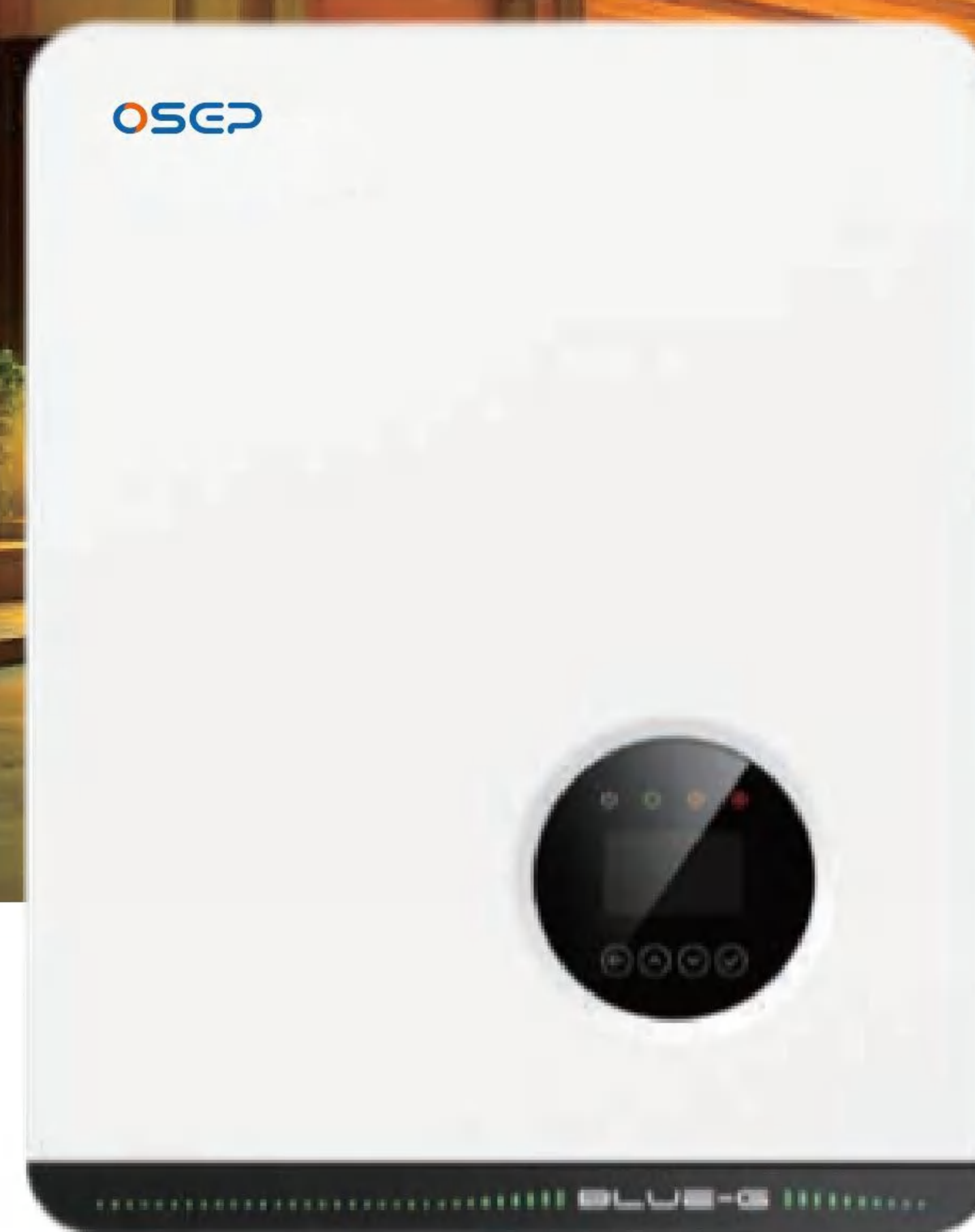
MODEL	Blue-12KTL	Blue-15KTL	Blue-20KTL
Input(DC)			
Max. DC Voltage	800V	800V	800V
Nominal Voltage	370V	370V	370V
Start Voltage	180V	180V	180V
MPPT Voltage Range	200V-750V	200V-750V	200V-750V
Number of MPP Tracker	2	2	2
Strings Per MPP Tracker	2	2	2
Max. Input Current Per MPPT	30A	30A	30A
Max. Short-circuit Current Per MPPT	40A	40A	40A
Output(AC)			
Nominal AC Output Power	12000W	15000W	20000W
Maximum AC Output Power	13200VA	16500VA	22000VA
Nominal AC Voltage	220 3L+N	220 3L+N	220 3L+N
AC Grid Frequency Range	50Hz/60Hz±5Hz	50Hz/60Hz±5Hz	50Hz/60Hz±5Hz
Maximum Output Current	34.6A	43.3A	57.7A
Power Factor(Φ)	0.8leading-0.8lagging		
THDi	3%		
Efficiency			
Max. Efficiency	98.6%	98.6%	98.6%
Euro Efficiency	98.3%	98.3%	98.3%
Protection devices			
DC Switch	Yes		
Output Over Current	Yes		
Anti-islanding Protection	Yes		
DC Reverse Polarity Protection	Yes		
String Fault Detection	Yes		
AC/DC Surge Protection	DC: Type II / AC: Type III / Type II Optional		
Insulation Detection	Yes		
AC Short Circuit Protection	Yes		
General Specifications			
Dimensions W x H x D	380x483x193mm	380x483x227mm	380x483x227mm
Weight	<25kg	<35kg	<35kg
Operating Temperature Range	-25°C~+60°C		
Cooling Type	Fan Cooling		
Max. Operation Altitude	4000m		
Max. Operation Humidity	0-100%(No Condensation)		
AC Output Terminal Type	Connector		
IP Class	IP66		
Topology	Transformer-less		
Communication	RS485/Wifi/4G		
Display	LCD		
Certification & Standard	EN/IEC62109-1/2 ; IEC/EN61000-6-2;IEC/EN61000-6-4;IEC61683;IEC60068;IEC60529;IEC62116;IEC61727;		

* Specifications subject to change without prior notice.



BLUE-G THREE PHASE SERIES

BluE-15KT / BluE-17KT / BluE-20KT / BluE-25KT



PV On-Grid String Inverter



Max. PV voltage up to 1100V
Type II DC /AC SPD



Compatible for big capacity PV panel
WiFi / 4G Plug optional



DC/AC ratio up to 2
IP66 protection



High efficiency up to 98.6%
Smaller and lighter

MODEL	BluE-15KT	BluE-17KT	BluE-20KT	BluE-25KT
Input(DC)				
Max. DC Voltage	1100V	1100V	1100V	1100V
Nominal Voltage	620V	620V	620V	620V
Start Voltage	180V	180V	180V	180V
MPPT Voltage Range	140 V~1,000V	140 V~1,000V	140 V~1,000V	140 V~1,000V
Number of MPP Tracker	2	2	2	2
Strings Per MPP Tracker	2/1	2	2	2
Max. Input Current Per MPPT	30A/15A	30A	30A	30A
Max. Short-circuit Current Per MPPT	40A/20A	40A	40A	40A
Output(AC)				
Nominal AC Output Power	15000W	17000W	20000W	25000W
Maximum AC Output Power	16500VA	18700VA	22000VA	27500VA
Nominal AC Voltage	400V 3L+N			
AC Grid Frequency Range	50Hz / 60Hz(±5Hz)			
Maximum Output Current	23.9A	27.1A	31.9A	39.9A
Power Factor(Φ)	0.8leading-0.8lagging			
THDi	3%			
Efficiency				
Max. Efficiency	98.6%	98.6%	98.6%	98.6%
Euro Efficiency	98.2%	98.3%	98.3%	98.3%
Protection devices				
DC Switch	Yes			
Output Over Current	Yes			
Anti-islanding Protection	Yes			
DC Reverse Polarity Protection	Yes			
String Fault Detection	Yes			
AC/DC Surge Protection	DC: Type II / AC: Type III / Type II Optional			
Insulation Detection	Yes			
AC Short Circuit Protection	Yes			
General Specifications				
Dimensions W x H x D	380x483x193mm			
Weight	25kg			
Operating Temperature Range	-25°C~+60°C			
Cooling Type	Fan Cooling			
Max. Operation Altitude	4000m			
Max. Operation Humidity	0-100%(No Condensation)			
AC Output Terminal Type	Connector			
IP Class	IP66			
Topology	Transformer-less			
Communication	RS485/Wifi/4G			
Display	LCD			
Certification & Standard	EN/IEC62109-1/2 ; IEC/EN61000-6-2;IEC/EN61000-6-4;IEC61683;IEC60068;IEC60529;IEC62116;IEC61727; EN50549-1;AS 4777.2;VDE-AR-N-4105;VDE 0126-1-1;CEI0-21;G98;G99;C10/C11;NB/T32004-2018 ; GB/T19964-2012			

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KSG THREE PHASE SERIES

KSG-25KT / KSG-30KT / KSG-40KT



PV On-Grid String Inverter



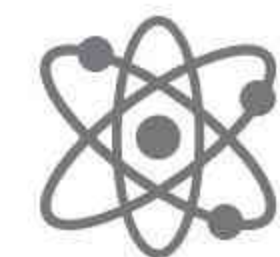
Max. PV voltage up to 1100V
Type II DC SPD / 3 MPPT



Compatible for big capacity PV panel
WiFi / 4G Plug optional



DC/AC ratio up to 1.5
IP66 protection



High efficiency up to 98.7%
Smaller and lighter

MODEL	KSG-25KT	KSG-30KT	KSG-40KT
Input(DC)			
Max. DC voltage	1100V	1100V	1100V
Nominal voltage	620V	620V	620V
Start voltage	180V	180V	180V
MPPT voltage range	200 V~1,000V	200 V~1,000V	200 V~1,000V
Number of MPPT tracker	3	3	3
Strings per MPPT tracker	2	2	2
Max. input current per MPPT	30A	30A	30A
Max. short-circuit current per MPPT	40A	40A	40A
Output(AC)			
Nominal AC output power	25000W	30000W	40000W
Maximum AC output power	27500VA	33000VA	44000VA
Nominal AC voltage	400V 3L+N		
AC grid frequency range	50 / 60Hz(±5Hz)		
Max. output current	39.9A	47.8A	63.8A
Power factor(Φ)	0.8leading-0.8lagging		
THDi	3%		
Efficiency			
Max. efficiency	98.6%	98.7%	98.7%
Euro efficiency	98.3%	98.4%	98.4%
Protection devices			
DC switch	Yes		
Output over current	Yes		
Anti-islanding protection	Yes		
DC reverse polarity protection	Yes		
String fault Detection	Yes		
DC/AC surge protection	Type II / Type III(Type II Optional)		
Residual Current Monitoring	Yes		
AC short circuit protection	Yes		
General Specifications			
Dimensions W x H x D	380x483x227mm		
Weight	32.5kg		
Operating temperature range	-25°C~+60°C		
Cooling type	Fan cooling		
Max. operation altitude	4000m		
Max. operation humidity	0-100%(No condensation)		
AC Output terminal type	OT terminal		
IP class	IP66		
Topology	Transformer-less		
Communication	RS485/Wifi/4G		
Display	LCD		
Certification & Standard	EN/IEC62109-1;EN/IEC62109-2;IEC/EN61000-6-2;IEC/EN61000-6-4;IEC61683;IEC60068;IEC60529;IEC62116;IEC61727;EN50549-1;AS 4777.2;NRS 097;VDE-AR-N-4105;VDE0126;CEI0-21;C10/C11;G98/G99		

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BluE Residential ESS

All In One Energy Storage System

All in One Design
CATL Battery inside



Battery Model		BluE-PACK5.1	
Physical		Operation	
Battery Type	LFP (LiFePO4)	Max. Charge/Discharge Current	50A/80A
System Weight	54KG	Rated DC Power	4096W
Dimension (W x D x H)	540*490*240mm	Max. Charge/Discharge Power	2825W/4096W
IP Protection	IP65	Operating Temperature Range	0 to 50°C charging -10 to 50°C discharging
Warranty	5 Year Product Warranty, 10 Year Performance Warranty	Humidity	0~95% (No condensation)
Electrical		BMS	
Energy Capacity	5.12kwh	Modules Connection	Max. 4
Usable Capacity	4.6kwh	Capacity	100-400Ah
Depth of Discharge (DoD)	90%	Power Consumption	<2W
Nominal Voltage	51.2V	Communication	CAN & RS485
DC Circuit Breaker	125A	Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Operating Voltage Range	44.8-56.5V	Certificate	
Internal Resistance	<20mΩ	Safety(Cell)	Pack: IEC/EN 62619;UN38.3 Cell: IEC/EN 62619;UN38.3;UL1973
Cycle Life	10000cycle		

*Maximum 4 battery pack in parallel.

Hybrid Inverter Model	BluE-S 3680D	BluE-S 5000D
PV String Input		
Max. DC Voltage	580V	580V
Nominal Voltage	400V	400V
MPPT Voltage Range	80V-560V	80V-560V
Start Voltage	130V	130V
Number of MPP Tracker	2	2
Strings Per MPP Tracker	1	1
Max. Input Current Per MPPT	15A	15A
Max. Short-circuit Current Per MPPT	18A	18A
AC Output (Grid)		
Nominal AC Output Power	3680W	5000W
Max. AC Apparent Power	7360VA (from grid)	7360VA (from grid)
Max. AC Output Power	3680W	5000W ¹
Nominal AC Voltage	230Vac	230Vac
AC Grid Frequency Range	50 / 60Hz±5Hz	50 / 60Hz±5Hz
Max. Output Current	16A	22A ²
Max. Input Current	32A	32A
Power Factor (cosΦ)	0.8leading-0.8lagging	0.8leading-0.8lagging
THDi	<3%	<3%
Battery Input		
Battery Type	LFP (LiFePO4)	LFP (LiFePO4)
Nominal Battery Voltage	48V	48V
Charging Voltage Range	40-60V	40-60V
Max. Charging Current	50A	100A
Max. Discharging Current	80A	100A
Battery Capacity	100-400Ah	100-400Ah
Charging Strategy for Li-ion Battery	Depend on the BMS	Depend on the BMS
AC Output (Backup)		
Max. Output Apparent Power	4000VA	5000VA
Peak Output Apparent Power	6900VA 10sec	6900VA 10sec
Max. Output Current	16A	20A
Nominal Output Voltage	230V	230V
Nominal Output Frequency	50/60Hz	50/60Hz
Output THDv (@Linear Load)	<3% (Linear Load)	<3% (Linear Load)
Efficiency		
Max. PV Efficiency	97.6%	97.6%
Euro. PV Efficiency	97.0%	97.0%
Protection		
DC Switch	Bipolar DC Switch (125A/Pole)	Bipolar DC Switch (125A/Pole)
Anti-islanding Protection	Yes	Yes
Output Over Current	Yes	Yes
DC Reverse Polarity Protection	Yes	Yes
String Fault Detection	Yes	Yes
AC/DC Surge Protection	DC Type II;AC Type III	DC Type II;AC Type III
Insulation Detection	Yes	Yes
AC Short Circuit Protection	Yes	Yes
General Specifications		
Dimensions W x H x D	540*590*240mm	
Weight	32kg	
Operating Temperature Range	-25°C~+60°C	
Noise (dB)	<25	
Cooling Type	Natural Convection	
Max. Operation Altitude	2000m	
Operation Humidity	0~95% (No Condensation)	
IP Class	IP65	
Topology	Battery Isolation	
Communication	RS485/CAN2.0/WIFI/4G	
Display	LCD/APP	
Certification & Standard	IEC/EN 62109-1&2;IEC/EN61000-6-1;IEC/EN61000-6-2;EN61000-6-3; IEC/EN61000-6-4;IEC/EN61000-3-11; EN61000-3-12;IEC60529;IEC 60068;IEC61683;IEC62116;IEC61727;EN50549-1; AS 4777.2;NRS 097;VDE-AR-N-4105;CEIO-21;G98;G99;C10/C11	

*1. Nominal AC output power is 4999W for Australia and 4600W for Germany and South Africa.

*2. Maximum output current is 21.7A for Australia and 20A for Germany and South Africa.

3-Ph BluE Residential ESS

All In One Energy Storage System CATL Battery Solutions



- Safety
- Simple
- Adaptable
- Efficient

Battery Model		BluE-PACK5.1	
Physical		Operation	
Battery type	LFP (LiFePO4)	Max. Charge/Discharge Current	50A/80A
System Weight	54KG	Rated DC power	4096W
Dimension (W x H x D)	540*490*240	Max. Charge/Discharge Power	2825W/4096W
IP Protection	IP65	Operating Temperature Range	0 to 50°C charging -10 to 50°C discharging
Warranty	5 Year Product Warranty, 10 Year Performance Warranty	Humidity	0~95% (No condensation)
Electrical		BMS	
Energy Capacity	5.12kwh	Capacity	200-800Ah
Usable Capacity	4.6kwh	Power Consumption	<2W
Depth of Discharge (DoD)	90%	Communication	CAN & RS485
Rated Voltage	51.2V	Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Operating Voltage Range	44.8-56.5V	Certificate	
Internal Resistance	<20mΩ	Safety(Cell)	Pack: IEC/EN 62619;UN38.3 Cell: IEC/EN 62619;UN38.3;UL1973
Cycle Life	10000cycle		

Hybrid Inverter Model	BluE-S 10KT
PV String Input	
Max. Continuous PV Input Power	20kW
Max. DC Voltage	1100V
Nominal Voltage	720V
MPPT Voltage Range	140V-1000V
MPPT Range (Full Load)	420V-850V
Start Voltage	130V
MPPT Tracker / Strings	2/2
Max. Input Current Per MPPT	15A
Max. Short-circuit Current Per MPPT	20A
AC Output (Grid)	
Nominal AC Output Power	10kW
Max. AC Apparent Power	11kVA
Nominal AC Voltage	400Vac 3W+N+PE
AC Grid Frequency Range	50 / 60Hz
Max. Output Current	14.5A
Max. Input Current	16A
Power Factor (cosΦ)	0.8leading-0.8lagging *
Battery Input	
Battery Type	LFP (LiFePO4)
Nominal Battery Voltage	48V
Charging Voltage Range	40-60V
Max. Charging Current	200A
Max. Discharging Current	200A
AC Output (Backup)	
Max. Output Apparent Power	10kVA
Rated Output Power	9.2kW
Rated/Max. Output Current	14.5A/16A
Nominal Output Voltage	400V
Nominal Output Frequency	50/60Hz (±2%)
Output THDv (@Linear Load)	<3% (Linear Load)
Protection	
Anti-islanding Protection	Yes
Output Over Current	Yes
DC Reverse Polarity Protection	Yes
String Fault Detection	Yes
AC/DC Surge Protection	DC Type II;AC Type III
Insulation Detection	Yes
AC Short Circuit Protection	Yes
General Specifications	
Dimensions W x H x D	540*980*240mm
Weight	42kg
Operating Temperature Range	-25°C~+60°C (Derating > 45°C)
Noise (dB)	<25
Cooling Type	Natural Convection
Max. Operation Altitude	3000m (Derating > 2000m)
Operation Humidity	0~95% (No Condensation)
IP Class	IP65
Topology	Battery Isolation
Communication	RS485/CAN2.0/WIFI/4G
Display	LCD/APP

* 0.95leading-0.95lagging for Germany

PROJECT CASES

Residential projects
for your reference

