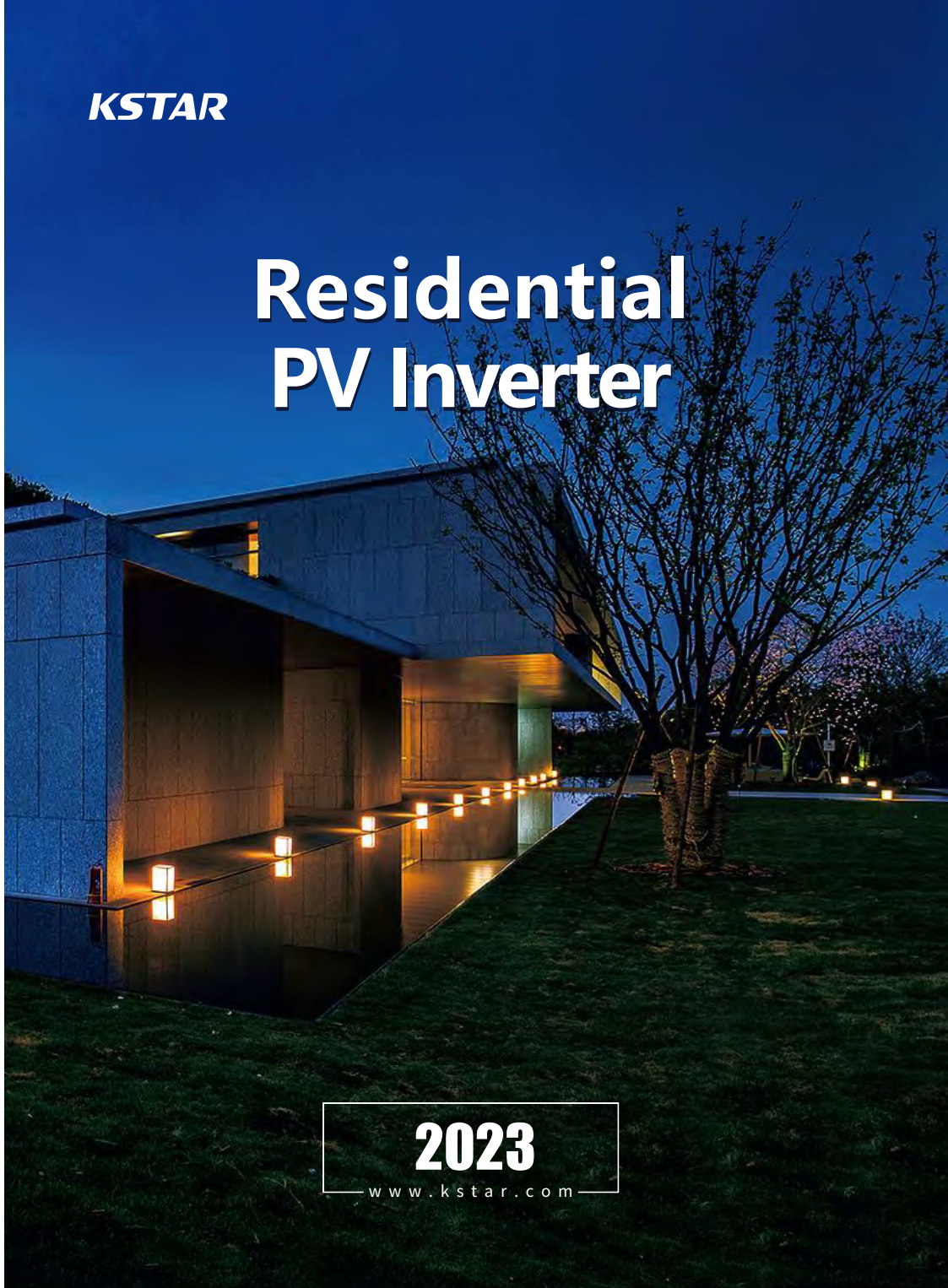
KSTAR

Residential PV Inverter



2023

www.kstar.com

202212-V1

KSTAR | POWERING GREEN FUTURE
WWW.KSTAR.COM

Over 30 Years Of Experience From Industry To Residential

About KSTAR

1993
Enter Offline UPS Company established

1995
Entery into US and EU markets

2000
Opened Guanlan Industrial Factory

2004
Enter High-power Online UPS

2009
Estabilish 1st PV Inverter

2010
Listed in Shenzhen Stock Exchange

2013
Opened Guangming Industrial Pack

2015
Certified by National Quality Management System

2018
Establish Joint Venture Factory with CATL

2019
CATL & KSTAR

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

Founded in 1993, Shenzhen KSTAR Science & Technology Co., Ltd (Stock Code:002518) is a National Torch Plan Key High-tech Enterprise, and also a pioneer of UPS industry and a total solution provider for Data Center Critical Infrastructure & PV Inverter Systems in Mainland China.

KSTAR is fully committed to the R&D and has been providing high-quality products with full service to over 90 countries and regions worldwide, leading the industrial development with innovation.

Office and service center globally

KSTAR 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 commericial 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 materals 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.

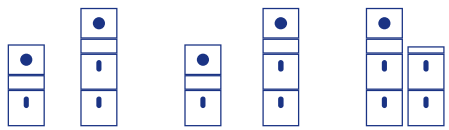
TOP PERFORMANCES

Maximum efficiency of energy conversion.
Storage capacity up to 20 kwh

BluE-S Hybrid Inverter

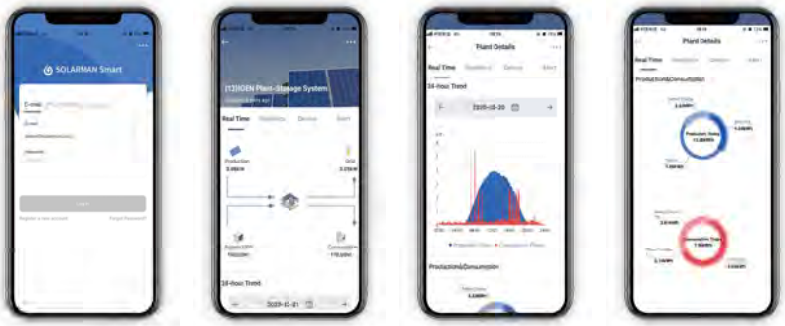
"Plug and Play" - Cable Box

BluE-PACK 5.1



Energy Management System

Intelligent energy on your hands



SOLARMAN Smart home system with APP Remote access to the system

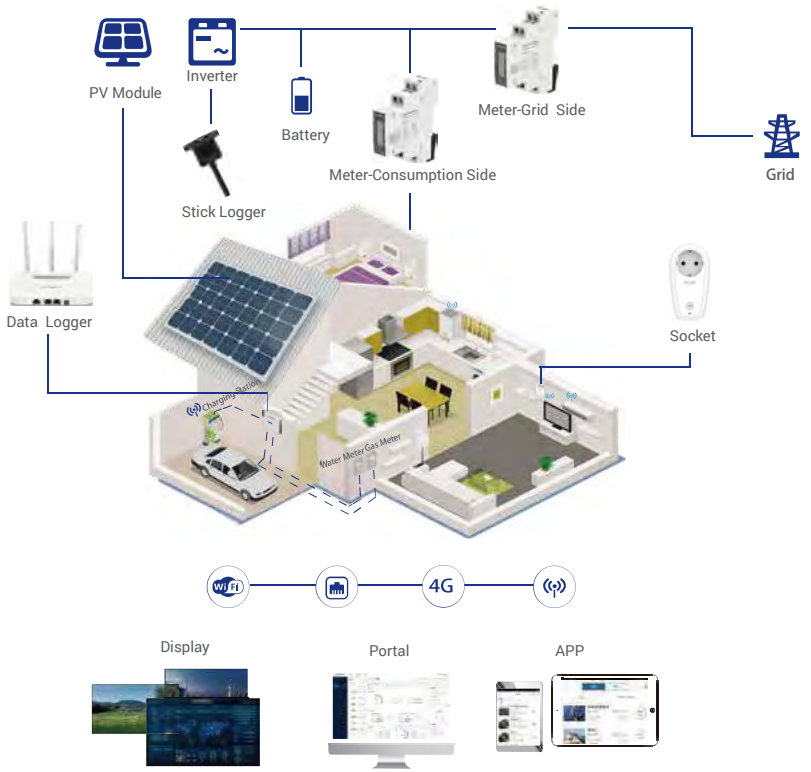
With the app you can monitor production and energy consumption of your home in real time. Set your preferences to optimize your energy independence, the protection against blackouts or energy savings.

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

KSTAR | POWERING GREEN FUTURE
WWW.KSTAR.COM

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 SERIES SINGLE PHASE

BluE-G 1000S-M1 / BluE-G 1500S-M1
BluE-G 2000S-M1 / BluE-G 3000S-M1

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
  IP66 Protection
- High Efficiency up to 97.6%
  Smaller and Lighter

MODEL	BluE-G 1000S-M1	BluE-G 1500S-M1	BluE-G 2000S-M1	BluE-G 3000S-M1
Input(DC)				
Max. DC Voltage	600Vdc	600Vdc	600Vdc	600Vdc
Nominal Voltage	380Vdc	380Vdc	380Vdc	380Vdc
Start Voltage[1]	60V	80V	80V	80V
MPPT Voltage Range	60V-560V	80V-560V	80V-560V	80V-560V
Number of MPPT	1	1	1	1
Strings Per MPPT	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 (cos Φ)	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 Protection	Yes	Yes	Yes	Yes
DC Reverse Polarity Protection	Yes	Yes	Yes	Yes
String Fault Detection	Yes	Yes	Yes	Yes
DC/AC 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℃~+60℃			
Cooling Type	Natural			
Max. Operating Altitude	4000m			
Max. Operating Humidity	0-100%			
AC Output Terminal Type	Quick Connector			
IP Class	IP66			
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.
1. Minimum voltage for inverter to start power output.

BluE-G SERIES SINGLE PHASE

BluE-G 3600D-M1 / BluE-G 4000D-M1
BluE-G 5000D-M1 / BluE-G 6000D-M1
BluE-G 8000D-M1

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-M1	BluE-G 4000D-M1	BluE-G 5000D-M1	BluE-G 6000D-M1	BluE-G 8000D-M1
Input(DC)					
Max. DC Voltage	600V	600V	600V	600V	600V
Nominal Voltage	380V	380V	380V	380V	380V
Start Voltage [8]	120V	120V	120V	120V	100V
MPPT Voltage Range	80V-560V	80V-560V	80V-560V	80V-560V	80V-540V
Number of MPPT	2	2	2	2	2
Strings Per MPPT	1	1	1	1	1
Max. Input Current Per MPPT	15A	15A	15A	15A	26A/16A[1]
Max. Short-circuit Current Per MPPT	18A	18A	18A	18A	31A/19A
Output(AC)					
Nominal AC Output Power	3600W	4000W	5000W [2]	6000W	8000W
Max. AC Apparent Power	3960VA [3]	4400VA	5500VA [4]	6000VA	8000VA
Nominal AC Voltage	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	24A[6]	26A	35A
Power Factor(cosΦ)	0.8 leading ~ 0.8 lagging				
THDi	<3%				
Efficiency					
Max. Efficiency	98.1%	98.3%	98.3%	98.3%	98.3%
Euro Efficiency	97.7%	97.9%	97.9%	97.9%	97.9%
Protection devices					
DC Switch	Yes	Yes	Yes	Yes	Yes
Anti-islanding Protection	Yes	Yes	Yes	Yes	Yes
Output Over Current Protection	Yes	Yes	Yes	Yes	Yes
DC Reverse Polarity Protection	Yes	Yes	Yes	Yes	Yes
String Fault Detection	Yes	Yes	Yes	Yes	Yes
DC/AC Surge Protection	DC: Type II / AC: Type III				
Insulation Detection	Yes	Yes	Yes	Yes	Yes
AC Short Circuit Protection	Yes	Yes	Yes	Yes	Yes
General Specifications					
Dimensions W x H x D	380X380X150mm				
Weight	10kg	11kg	11kg	11kg	13kg
Operating Temperature Range	-25℃~+60℃				
Cooling Type	Natural				Fan cooling
Max. Operating Altitude	≤4000m				
Max. Operating 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 [7]				

*1. The maximum current of PV1 is 26A , So PV1 can be expanded into two Strings by using Y-connectors.
*2. Nominal AC output power is 4999W for Australia and 4600W for Germany and South Africa.
*3. Max. AC apparent power is 3680VA for the UK.
*4. Max. AC apparent power is 4999VA for Australia, 5000VA for Belgium and 4600VA for Germany and South Africa.
*5. Maximum output current is16A for England.
*6. Maximum output current is 21.7A for Australia and 20A for Germany and South Africa.
*7. For BluE-G 8000D only EN/IEC62109-1/2 ; IEC/EN61000-6-2;IEC/EN61000-6-4;IEC61683;IEC60068;IEC60529;IEC62116;IEC61727;INMETRO are available at the beginning of 2023.
*8. Minimum voltage for inverter to start power output.

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-M1	BluE-4KT-M1	BluE-5KT-M1	BluE-6KT-M1	BluE-8KT-M1	BluE-10KT-M1	BluE-12KT-M1
Input(DC)							
Max. DC Voltage	1100V	1100V	1100V	1100V	1100V	1100V	1100V
Nominal Voltage	620V	620V	620V	620V	620V	620V	620V
Start Voltage[1]	250V	250V	250V	250V	250V	250V	250V
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 MPPT	2	2	2	2	2	2	2
Strings Per MPPT	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 Protection	Yes						
Anti-islanding Protection	Yes						
DC Reverse Polarity Protection	Yes						
String Fault Detection	Yes						
DC/AC 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℃~+60℃						
Cooling Type	Natural cooling						
Max. Operating Altitude	4000m						
Max. Operating 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						

* Specifications subject to change without prior notice.
1. Minimum voltage for inverter to start power output.

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-M1	BluE-15KTL-M1	BluE-20KTL-M1
Input(DC)			
Max. DC Voltage	800V	800V	800V
Nominal Voltage	370V	370V	370V
Start Voltage[1]	250V	250V	250V
MPPT Voltage Range	200V-750V	200V-750V	200V-750V
Number of MPPT	2	2	3
Strings Per MPPT	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 Protection	Yes		
Anti-islanding Protection	Yes		
DC Reverse Polarity Protection	Yes		
String Fault Detection	Yes		
DC/AC 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	380x483x223mm	380x483x227mm
Weight	20.7kg	25.5kg	32.5kg
Operating Temperature Range	-25℃~+60℃		
Cooling Type	Fan Cooling		
Max. Operating Altitude	4000m		
Max. Operating 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.
1. Minimum voltage for inverter to start power output.

BLUE-G SERIES THREE PHASE

BluE-15KT-M1 / BluE-17KT-M1 / BluE-20KT -M1/ BluE-25KT-M1

PV On-Grid String Inverter

- Max. PV Voltage up to 1100V
  Type II DC /AC SPD
- Compatable 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-M1	BluE-17KT-M1	BluE-20KT-M1	BluE-25KT-M1
Input(DC)				
Max. DC Voltage	1100V	1100V	1100V	1100V
Nominal Voltage	620V	620V	620V	620V
Start Voltage[1]	250V	250V	250V	250V
MPPT Voltage Range	140 V~1,000V	140 V~1,000V	140 V~1,000V	140 V~1,000V
Number of MPPT	2	2	2	2
Strings Per MPPT	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 Protection	Yes			
Anti-islanding Protection	Yes			
DC Reverse Polarity Protection	Yes			
String Fault Detection	Yes			
DC/AC 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	20.7kg			
Operating Temperature Range	-25℃~+60℃			
Cooling Type	Fan Cooling			
Max. Operating Altitude	4000m			
Max. Operating 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			

* Specifications subject to change without prior notice.
1. Minimum voltage for inverter to start power output.

KSG SERIES THREE PHASE

KSG-30KT-M1 / KSG-40KT-M1

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-30KT-M1	KSG-40KT-M1
Input(DC)		
Max. DC Voltage	1100V	1100V
Nominal Voltage	620V	620V
Start Voltage[1]	250V	250V
MPPT Voltage Range	200 V~1,000V	200 V~1,000V
Number of MPPT	3	3
Strings Per MPPT	2	2
Max. Input Current Per MPPT	30A	30A
Max. Short-circuit Current Per MPPT	40A	40A
Output(AC)		
Nominal AC Output Power	30000W	40000W
Maximum AC Output Power	33000VA	44000VA
Nominal AC Voltage	400V 3L+N	
AC Grid Frequency Range	50 / 60Hz(±5Hz)	
Max. Output Current	47.8A	63.8A
Power Factor(Φ)	0.8leading-0.8lagging	
THDi	3%	
Efficiency		
Max. Efficiency	98.7%	98.7%
Euro Efficiency	98.4%	98.4%
Protection Devices		
DC Switch	Yes	
Output Over Current Protection	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	380x483x223mm	380x483x227mm
Weight	25.5kg	32.5kg
Operating Temperature Range	-25℃~+60℃	
Cooling Type	Fan cooling	
Max. Operating Altitude	4000m	
Max. Operating 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;IEC/EN 61000-6-1;IEC/EN 61000-6-3NC RfG;NRS 097;VDE-AR-N-4105;VDE0126;CEI0-21;C10/C11;G98/G99	

* Specifications subject to change without prior notice.
1. Minimum voltage for inverter to start power output.

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

*Maximum 4 battery pack in parallel

Hybrid Inverter Model	BluE-S 3680D-M1	BluE-S 5000D-M1
PV String Input		
Max. DC Voltage	580V	580V
Nominal Voltage	400V	400V
MPPT Voltage Range	80V-560V	80V-560V
Start Voltage[3]	150V	150V
Number of MPPT Tracker	2	2
Strings Per MPPT 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 Protection	Yes	Yes
DC Reverse Polarity Protection	Yes	Yes
String Fault Detection	Yes	Yes
DC/AC 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℃~+60℃	
Noise (dB)	<25	
Cooling Type	Natural Convection	
Max. Operating Altitude	2000m	
Operating 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;CEI0-21;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. Minimum voltage for inverter to start power output.

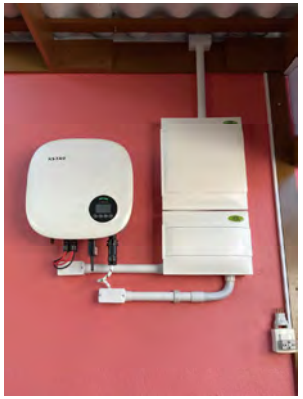
Battery Model	BluE-PACK5.1
Physical	
Battery Type	LFP (LiFePO4)
Weight	54KG
Dimension (W x H x D)	540*490*240mm
IP Protection	IP65
Warranty	5 Year Product Warranty, 10 Year Performance Warranty
Electrical	
Energy Capacity	5.12kwh
Usable Capacity	4.6kwh
Depth of Discharge (DoD)	90%
Nominal Voltage	51.2V
DC Circuit Breaker	125A
Operating Voltage Range	44.8-56.5V
Internal Resistance	<20mΩ
Cycle Life	10000cycle
Operation	
Max. Charge/Discharge Current	50A/80A
Rated DC Power	4096W
Max. Charge/Discharge Power	2825W/4096W
Operating Temperature Range	0 to 50℃ charging -10 to 50℃ discharging
Humidity	0~95% (No condensation)
BMS	
Modules Connection	Max.8
Capacity	200/400/600/800Ah
Power Consumption	<2W
Communication	CAN & RS485
Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Certificate	
Safety(Cell)	Pack: IEC/EN 62619;UN38.3 Cell: IEC/EN 62619;UN38.3;UL1973

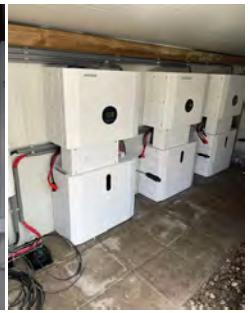
Hybrid Inverter Model	E10KT
PV String Input	
Max. Continuous PV Input Power	20kW
Max. DC Voltage	1100V
Nominal Voltage	720V
MPPT Voltage Range	140V-1000V
MPPT Voltage Range (Full Load)	420V-850V
Start Voltage[1]	200V
Number of MPPT	2
Strings Per MPPT	1
Max. Input Current Per MPPT	15A
Max. Short-circuit Current Per MPPT	20A
AC Output (Grid)	
Nominal AC Output Power	10kW
Max. AC Apparent Power	11kVA
Nominal AC Voltage	400Vac
AC Grid Frequency Range	50 / 60Hz±5Hz
Nominal Output Current	14.5A
Max. Output Current	16A
Power Factor (cosΦ)	0.8leading-0.8lagging *
THDi	< 3%
Battery Input	
Battery Type	LFP (LiFePO4)
Nominal Battery Voltage	51.2V
Charging Voltage Range	44-58V
Max. Charging Current	160A
Max. Discharging Current	200A
Battery Capacity	200/400/600/800Ah
AC Output (Backup)	
Nominal AC Output Power	9.2kW
Max. AC Output Power	10kVA
Nominal Output Current	13.3A
Max. Output Current	14.5A
Nominal Output Voltage	400V
Nominal Output Frequency	50/60Hz
Output THDv (@Linear Load)	<2% (Linear Load)
Efficiency	
Max. PV Efficiency	97.6%
Euro. PV Efficiency	97.0%
Protection	
Anti-islanding Protection	Yes
Output Over Current Protection	Yes
DC Reverse Polarity Protection	Yes
String Fault Detection	Yes
DC/AC 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	49kg
Operating Temperature Range	-25℃~+60℃
Cooling Type	Natural Convection
Max. Operating Altitude	2000m
Operating Humidity	0~95% (No Condensation)
IP Class	IP65
Topology	Battery Isolation
Communication	RS485/CAN2.0/WIFI/4G
Display	LCD/APP

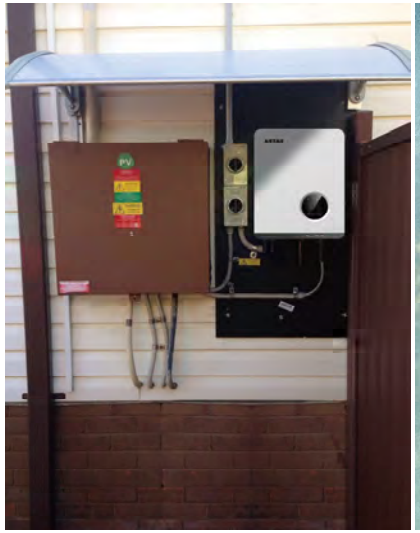
* 0.95leading-0.95lagging for Germany.
1. Minimum voltage for inverter to start power output.

PROJECT CASES

Thanks for the pictures
from Pro@Energy.







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