

Serving inspiration with every generation



KSTAR
Powering the Future

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KSTAR
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K-Home



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2024

ABOUT KSTAR

1993

KSTAR Established
Enter Offline UPS Field

1998

New Manufacturing Base

Guanlan Industrial Park
Inaugurated in Shenzhen

2009

Enter New Energy Field

1st PV Inverter Produced

2013

Explore New Opportunities

Enter the Electric Vehicles Market

2019

CATL & KSTAR Partnership

Establish Joint Venture Factory with CATL

2023

KSTAR Vietnam
Vietnam Plant in Operation

1996

Overseas Expansion

Enter the European and US Market

2004

Further Development

Enter High-power Online UPS Field

2010

IPO and Public Debut

Listed in Shenzhen Stock Exchange

2015

National Certified Technology Center

Certified by National Quality Management System

2021

Further Invest in ESS Facilities

Open Jiangxi Changxin Gold Sunshine Power Supply Co.,Ltd



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180+

Countries & Regions

42GW

PV Installation

30+

Years History

KSTAR, a leading global new energy solution provider founded in 1993, excels in key solar markets worldwide. Our expertise spans the spectrum, delivering cutting-edge PV inverters and energy storage systems for residential, commercial & industrial, and large-scale utility needs.

Backed by 30+ years of experience in electrical and electronic technology, KSTAR is committed to superior new energy solutions for a diverse clientele in 180 countries and regions, with an impressive 43GW of KSTAR products already installed globally.

We are always generating superior solutions for energy and more. Let's power the future together.

Thriving Three Decades: Your Industrial Partner and Green Home Expert



BluE-S Series Residential ESS

Single Phase / All-in-one Hybrid System / 3.68-6 kW



Battery Model		BluE-PACK 5.1	
Physical		Operation	
Battery Type	LFP (LiFePO4)	Max. Charge/Discharge Current	50 A / 80 A
Weight	54 kg	Rated DC power	4096 W
Dimension (W x H x D)	540 x 490 x 240 mm	Max. Charge/Discharge Power	2825 W / 4096 W
IP Protection	IP 65	Operating Temperature Range	-10 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	5.12 kWh	Modules Connection	Max. 4
Usable Capacity	4.6 kWh	Capacity	100 - 400 Ah
Depth of Discharge (DoD)	90%	Power Consumption	< 2 W
Nominal Voltage	51.2 V	Communication	CAN & RS-485
DC Circuit Breaker	125 A	Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Operating Voltage Range	44.8 - 56.5 V	Certificate	
Internal Resistance	< 20 mΩ	Safety(Cell)	Pack: IEC/EN 62619; UN 38.3 Cell: IEC/EN 62619; UN 38.3; UL 1973
Cycle Life	10000 cycle		

*Maximum 4 battery pack in parallel.

Hybrid Inverter Model	BluE-S 3680D-M1	BluE-S 5000D-M1	BluE-S 6000D-M1
PV String Input			
Max. DC Voltage		580 V	
Nominal Voltage		400 V	
MPPT Voltage Range		80 V - 560 V	
Start Voltage ¹⁾		150 V	
Number of MPPT Tracker		2	
Strings Per MPPT Tracker		1	
Max. Input Current Per MPPT		15 A	
Max. Short-circuit Current Per MPPT		18 A	
AC Output (Grid)			
Nominal AC Output Power	3680 W	5000 W ²⁾	6000 W
Max. AC Apparent Power	7360 VA ³⁾	7360 VA ⁴⁾	7360 VA
Max. AC Output Power	3680 W	5000 W ²⁾	6000 W
Nominal AC Voltage		230 Vac	
AC Grid Frequency Range		50 / 60 Hz ±5Hz	
Max. Output Current	16 A	22 A ⁵⁾	25 A
Max. Input Current		32 A	
Power Factor (cosΦ)		0.8 leading - 0.8 lagging	
THDi		< 3%	
Battery Input			
Battery Type		LFP (LiFePO4)	
Nominal Battery Voltage		48 V	
Charging Voltage Range		40 - 60 V	
Max. Charging Current	50 A	100 A	100 A
Max. Discharging Current	80 A	100 A	100 A
Battery Capacity		100 - 400 Ah	
Charging Strategy for Li-ion Battery		Depend on the BMS	
AC Output (Backup)			
Max. Output Apparent Power	4000 VA	5000 VA	5000 VA
Peak Output Apparent Power		6900 VA 10sec	
Max. Output Current	16 A	20 A	20 A
Nominal Output Voltage		230 V	
Nominal Output Frequency		50 / 60Hz	
Output THDv (@Linear Load)		< 3% (Linear Load)	
Efficiency			
Max. PV Efficiency		97.6%	
Euro. PV Efficiency		97.0%	
Protection			
DC Switch		Bipolar DC Switch (125 A / Pole)	
Anti-islanding Protection		Yes	
Output Over Current Protection		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 x 590 x 240 mm	
Weight		32 kg	
Operating Temperature Range		-25°C ~+ 60°C	
Noise (dB)		< 25	
Cooling Type		Natural Convection	
Max. Operating Altitude		2000 m	
Operating Humidity		0 ~ 95% (No Condensation)	
IP Class		IP65	
Topology		Battery Isolation	
Communication		RS-485 / CAN 2.0 / WIFI / 4G	
Display		LCD / APP	
Certification & Standard	IEC/EN 62109-1&2; IEC/EN 61000-6-1; IEC/EN 61000-6-2; EN 61000-6-3; IEC/EN 61000-6-4; IEC/EN 61000-3-11; EN 61000-3-12; IEC 60529; IEC 60068; IEC 61683; IEC 62116; IEC 61727; EN 50549-1; AS 4777.2; NRS 097; VDE-AR-N-4105; CEI 0-21; G98/G99; C10/11		

1) Minimum voltage for inverter to start power output.

2) Nominal AC output power is 4999 W for Australia and 4600 W for Germany and South Africa.

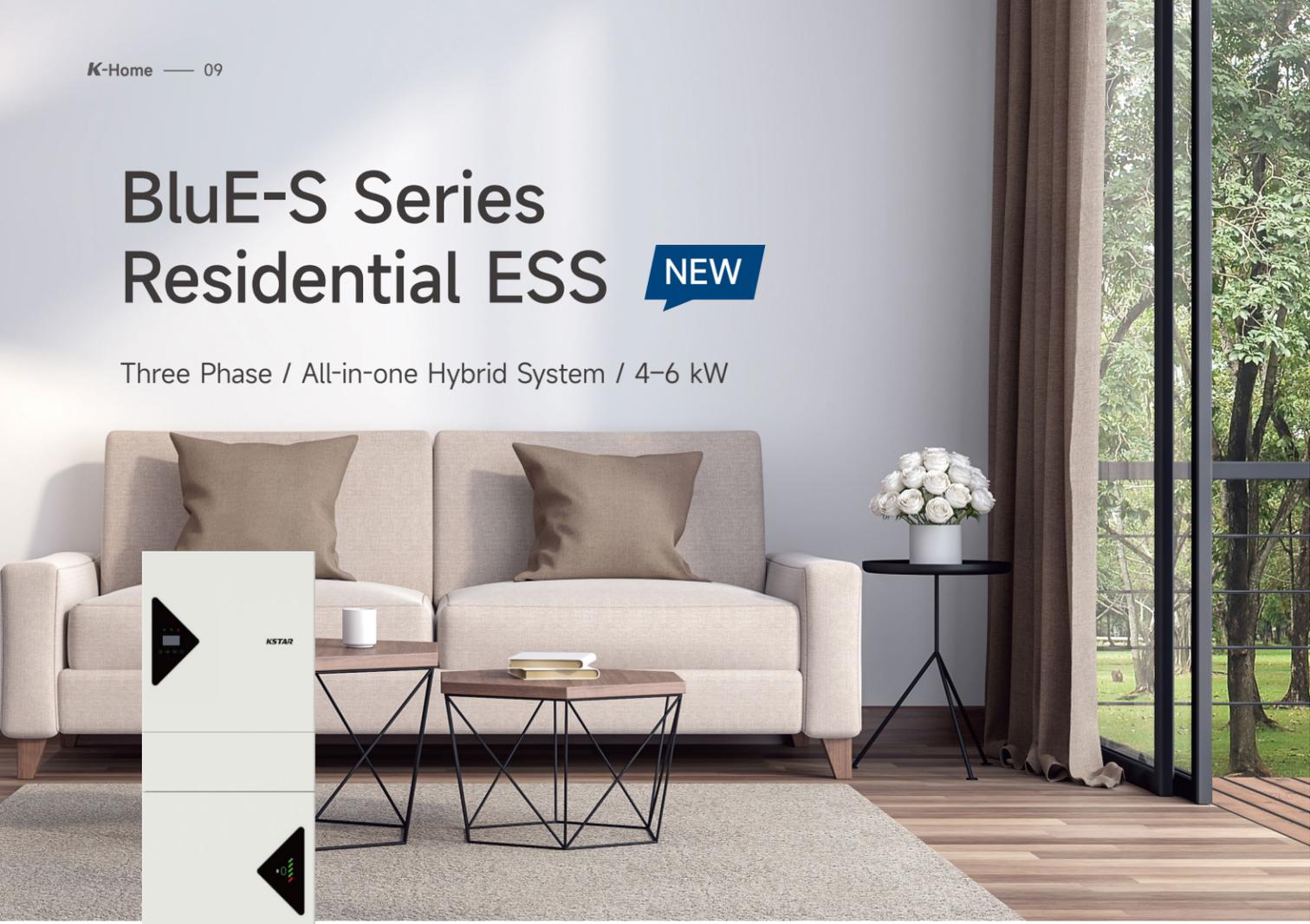
3) Max. AC apparent power is 3680 VA for the UK.

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

5) Maximum output current is 21.7 A for Australia and 20 A for Germany and South Africa.

BluE-S Series Residential ESS NEW

Three Phase / All-in-one Hybrid System / 4-6 kW



Battery Model		BluE-PACK 5.1	
Physical		Operation	
Battery type	LFP (LiFePO4)	Max. Charge/Discharge Current	50 A / 80 A
Weight	54 kg	Rated DC power	4096 W
Dimension (W x H x D)	540 x 490 x 240 mm	Max. Charge/Discharge Power	2825 W / 4096 W
IP Protection	IP65	Operating Temperature Range	-10 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	5.12 kWh	Modules Connection	Max.8
Usable Capacity	4.6 kWh	Capacity	100 / 200 / 300 / 400Ah
Depth of Discharge (DoD)	90%	Power Consumption	< 2 W
Nominal Voltage	51.2 V	Communication	CAN & RS-485
DC Circuit Breaker	125 A	Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Operating Voltage Range	44.8 - 56.5 V	Certificate	
Internal Resistance	< 20mΩ	Safety(Cell)	Pack: IEC/EN 62619; UN 38.3 Cell: IEC/EN 62619; UN 38.3; UL 1973
Cycle Life	10000 cycle		

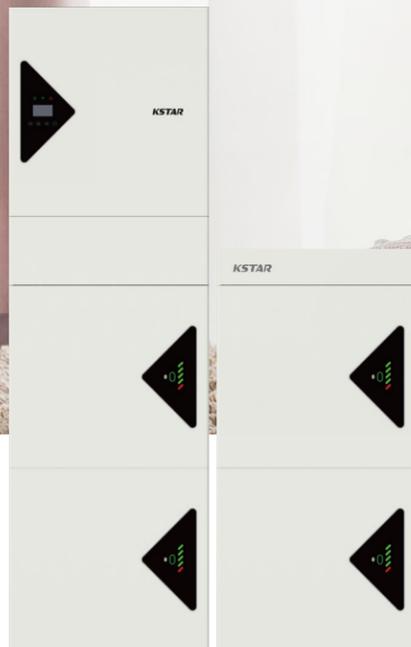
*All specifications are subject to change without prior notice.

Hybrid Inverter Model	E4KT	E5KT	E6KT
PV String Input			
Max. Continuous PV Input Power	8 kW	10 kW	12 kW
Max. DC Voltage		1000 V	
Nominal Voltage		720 V	
MPPT Voltage Range		140 V - 950 V	
MPPT Voltage Range (Full Load)	300 V - 850 V	320V - 850 V	350 V - 850 V
Start Voltage ¹⁾		200 V	
Number of MPPT		2	
Strings Per MPPT		1	
Max. Input Current Per MPPT		15A	
Max. Short-circuit Current Per MPPT		20 A	
AC Output (Grid)			
Nominal AC Output Power	4 kW	5 kW	6 kW
Max. AC Apparent Power	4.4 kVA	5.5 kVA	6.6 kVA
Nominal AC Voltage		400 Vac	
AC Grid Frequency Range		50 / 60Hz ±5Hz	
Nominal Output Current	5.8 A	7.3 A	8.7 A
Max. Output Current	6.4 A	8 A	9.6 A
Power Factor (cos)		0.8 leading - 0.8 lagging	
THDi		<3%	
Battery Input			
Battery Type		LFP (LiFePO4)	
Nominal Battery Voltage	51.2 V	51.2 V	51.2 V
Charging Voltage Range		44 - 58 V	
Max. Charging Current	100 A	100 A	100 A
Max. Discharging Current	100 A	120 A	120 A
Battery Capacity		100 / 200 / 300 / 400 Ah	
AC Output (Backup)			
Nominal AC Output Power	4 kW	5 kW	6 kW
Max. AC Output Power	4 kVA	5 kVA	6 kVA
Nominal Output Current	5.8 A	7.3A	7.3 A
Max. Output Current	5.8 A	7.3 A	7.3 A
Nominal Output Voltage		400 V	
Nominal Output Frequency		50 / 60Hz	
Output THDv (@Linear Load)		< 2% (Linear Load)	
Efficiency			
Max. PV Efficiency		97.60%	
Euro. PV Efficiency		97.00%	
Protection			
Anti-islanding Protection		Yes	
Output Over Current Protection		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 x 980 x 240 mm	
Weight		49 kg	
Operating Temperature Range		-25°C ~+ 60°C	
Cooling Type		Natural Convection	
Max. Operation Altitude		2000 m	
Operation Humidity		0 ~ 95% (No Condensation)	
IP Class		IP65	
Topology		Battery Isolation	
Communication		RS-485 / CAN2.0 / WIFI / 4G	
Display		LCD / APP	

1) Minimum voltage for inverter to start power output.
* This page is for reference only. Actual contract shall prevail. The Product will be available in 2024 Q1.

BluE-S Series Residential ESS

Three Phase / All-in-one Hybrid System / 8-12 kW



Battery Model		BluE-PACK 5.1	
Physical		Operation	
Battery Type	LFP (LiFePO4)	Max. Charge/Discharge Current	50 A / 80 A
Weight	54 kg	Rated DC power	4096 W
Dimension (W x H x D)	540 x 490 x 240 mm	Max. Charge/Discharge Power	2825 W / 4096 W
IP Protection	IP65	Operating Temperature Range	-10 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	5.12 kWh	Modules Connection	Max. 8
Usable Capacity	4.6 kWh	Capacity	200 / 400 / 600 / 800 Ah
Depth of Discharge (DoD)	90%	Power Consumption	< 2 W
Nominal Voltage	51.2 V	Communication	CAN & RS-485
DC Circuit Breaker	125 A	Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Operating Voltage Range	44.8 - 56.5 V	Certificate	
Internal Resistance	< 20 mΩ	Safety(Cell)	Pack: IEC/EN 62619; UN 38.3 Cell: IEC/EN 62619; UN 38.3; UL 1973
Cycle Life	10000 cycle		

*All specifications are subject to change without prior notice.

Hybrid Inverter Model	E8KT	E10KT	E12KT
PV String Input			
Max. Continuous PV Input Power	16 kW	20 kW	20 kW
Max. DC Voltage		1100 V	
Nominal Voltage		720 V	
MPPT Voltage Range		140 V - 1000 V	
MPPT Voltage Range (Full Load)	380 V - 850 V	420 V - 850 V	480 V - 850 V
Start Voltage ¹⁾		200 V	
Number of MPPT		2	
Strings Per MPPT		1	
Max. Input Current Per MPPT		15 A	
Max. Short-circuit Current Per MPPT		20 A	
AC Output (Grid)			
Nominal AC Output Power	8 kW	10 kW	12 kW
Max. AC Apparent Power	8.8 kVA	11 kVA ²⁾	13.2 kVA
Nominal AC Voltage		400 Vac	
AC Grid Frequency Range		50 / 60Hz ±5Hz	
Nominal Output Current	11.6 A	14.5 A	17.4 A
Max. Output Current	12.8 A	16 A	19.2 A
Power Factor (cosΦ)		0.8 leading - 0.8 lagging	
THDi		<3%	
Battery Input			
Battery Type		LFP (LiFePO4)	
Nominal Battery Voltage		51.2 V	
Charging Voltage Range		44 - 58 V	
Max. Charging Current		160 A	
Max. Discharging Current	160 A	200 A	200 A
Battery Capacity		200 / 400 / 600 / 800 Ah	
AC Output (Backup)			
Nominal AC Output Power	7.36 kW	9.2 kW	9.2 kW
Max. AC Output Power	8 kVA	10 kVA	10 kVA
Nominal Output Current	10.7 A	13.3 A	13.3 A
Max. Output Current	11.6 A	14.5 A	14.5 A
Nominal Output Voltage		400 V	
Nominal Output Frequency		50 / 60 Hz	
Output THDv (@Linear Load)		< 2% (Linear Load)	
Efficiency			
Max. PV Efficiency		97.60%	
Euro. PV Efficiency		97.00%	
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 x 980 x 240 mm	
Weight		49 kg	
Operating Temperature Range		-25°C ~+ 60°C	
Cooling Type		Natural Convection	
Max. Operating Altitude		2000 m	
Operating Humidity		0 ~ 95% (No Condensation)	
IP Class		IP65	
Topology		Battery Isolation	
Communication		RS-485 / CAN 2.0 / WIFI / 4G	
Display		LCD / APP	
Certification & Standard	IEC/EN 62109-1&2; IEC/EN 61000-6-1; IEC/EN 61000-6-2; EN 61000-6-3; IEC/EN 61000-6-4; IEC/EN 61000-3-11; EN 61000-3-12; IEC 60529; IEC 60068; IEC 61683; IEC 62116; IEC 61727; EN 50549-1; VDE-AR-N 4105; C10/11; VDE 0126-1-1; CEI 0-21; NC Rfg; G98; EIFS; NTS&UNE 217001		

1) Minimum voltage for inverter to start power output.

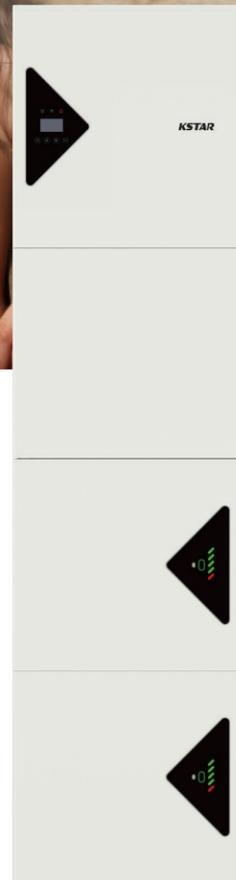
2) According to the C10/11 of Synergrid, the maximum AC output power is 10 kVA and the maximum AC output current is 14.5A.

BluE-S Series (US) Residential ESS

Split Phase / All-in-one Hybrid System / 8-15 kW



Battery Model	BP 48100 PF	
Battery Specification		
Battery Capacity	5 kWh	
Usable Capacity	4.5 kWh - Discharge Capacity from 100% to Min SoE	
Battery Type	LFP (LiFePO4)	
Rated Voltage	51.2 V	
Operating Voltage Range	44.8 V - 56.5 V	
Communication Interface	CAN & RS-485	
Warranty	10 years performance warranty	
Operations		
Maximum Continuous Charging Current	50 A	
Maximum Continuous Discharging Current	80 A	
Operating Temperature Range	-10°C --+ 50°C	
Storage Temperature Range	-10°C --+ 55°C	
Altitude	2000 m	
Relative Humidity	0% ~ 90%	
Cooling Strategy	Natural Cooling	
BMS		
Capacity	100 / 200 / 300 / 400 / 600 Ah	
Monitored Item	Current; Cell Voltage; Battery Voltage Accuracy; Ambient Temperature;	
LED User Interface	LED Indication for Battery Status (On, Operational, Standby, Fault, Capacity of SOC)	
Physical		
Weight	56.5 Kg	
Size (W×H×D) mm	540 x 490 x 240 mm	
Certificate		
Safety	Cell	UL 9540 A
	Battery Pack	FCC Part 15 Class B UL 9540 A; UL 1973 (UL1973)
Certificate	FCC Part 15 Class B; UL 1973; Class 9; UN38.3, IP66 / NEMA 3R	



* The product will be available in the third quarter of 2024

Hybrid Inverter Model	E8KD	E10KD	E12KD	E15KD
PV Input				
Max. PV Input Power	16 kW	18 kW	22 kW	25 kW
Max. PV Input Voltage	500 Vdc			
MPPT Voltage Range	120 ~ 425 Vdc			
Start Voltage	120 V			
Nominal Voltage	380 Vdc			
MPPT Voltage Range With Full Load	200 ~ 425 V	240 ~ 425 V	200 ~ 425 V	240 ~ 425 V
Number of MPPT Tracker	2	2	3	3
Max. Input Current	30 A*2	30 A*2	30 A*3	30 A*3
Max. Short-circuit Current	40 A*2	40 A*2	40 A*3	40 A*3
AC Output (On Grid)				
Nominal Output Power	120 / 240 / 208 V Split Phase			
Output Voltage Range	160 V~ 300 Vac(L-L)			
Output Frequency	50 / 60Hz (±5Hz), (Adjustable)			
Max. Output Current	33.4 A	41.7 A	50 A	62.5 A
Max. Output Power	8 kVA	10 kVA	12 kVA	15 kVA
Nominal Output Power	8 kW	10 kW	12 kW	15 kW
Output Connection	Split phase , 2/3 phase , single phase, transformerless			
Power Factor (cosΦ)	0.8 leading ~ 0.8 lagging(Adjustable)			
THDi	< 5%			
AC Output (Backup)				
Nominal Output Voltage	120 / 240 / 208 V Split Phase			
Nominal Output Frequency	50 / 60 Hz (±0.2%)			
Nominal Output Current	33.4 A (RMS)	41.7 A (RMS)	50 A (RMS)	62.5 A (RMS)
Nominal Output Power(Daytime)	8 kW	10 kW	12 kW	15 kW
Max. Output Power(Daytime)	8 kVA	10 kVA	12 kVA	15 kVA
Nominal Output Power(Nighttime)	7.36 kW	9.2 kW	11 kW	11 kW
Max. Output Power(Nighttime)	8 kVA	10 kVA	12 kVA	12 kVA
THDv	< 2% (Linear load)			
On/Off Grid Switching Time	< 20 ms			
Over Current Protection	50 A / pole	60 A / pole	75 A / pole	100 A / pole
Battery Input				
Battery Type	Lithium battery			
Battery Nominal Voltage	51.2 V			
Battery Voltage Range	44 - 58 V			
Depth Of Discharge	90% DOD (10% ~ 90% Adjustable)			
Max. Discharging Current	200 A	200 A	240 A	240 A
Max. Charging Current	160 A (1 ~ 160 A Adjustable)			
Max. Discharging Power	8 kW	10 kW	12 kW	12 kW
Max. Charging Power	8 kW	8 kW	10 kW	10 kW
Battery Switch	Single - pole DC switch (2*150A / Pole)			
Capacity	100 / 200 / 300 / 400 / 600 Ah			
Efficiency				
MPPT Efficiency	> 99.9%			
General Specifications				
Cooling Type	Intelligent air cooling			
DC Switch	Optional			
Communication Port	RS-485 / CAN 2.0 / WIFI			
Protection Class	Class II			
Operating Temperature Range	-25°C --+ 60°C (Rated power@40°C)			
Storage Humidity Range	0 ~ 95% (No Condensation)			
Operating Altitude	≤ 2000 m			
Overvoltage Type	II(DC side); III(AC side)			
IP Class	IP65 / 3R			
Weight(KG)	< 60 kg			
Dimensions(W×H×D)mm	540 x 1050 x 240			
Protection & Certifications				
Certifications	Electronics Certified Safety by SGS Labs to NEC & UL Specs - NEC 690.4B & NEC 705.4/6 Grid Sell Back — UL 1741 - 2010/2018; IEEE 1547a - 2003/2014; FCC 15 Class B; UL 1741SB; CA Rule21; HECO Rule 14 H			
Protection	PV DC Disconnect Switch — NEC 240.15 Ground Fault Detection — NEC 690.5 PV Rapid Shutdown Control — NEC 690.12 PV Arc Fault Detection — NEC 690.11		PV Input Lightning Protection PV String Input Reverse Polarity Protection AC Output Breakers Battery Breaker / Disconnect Surge Protection	

BluE-G Series

Single Phase / On-grid / 1-3 kW

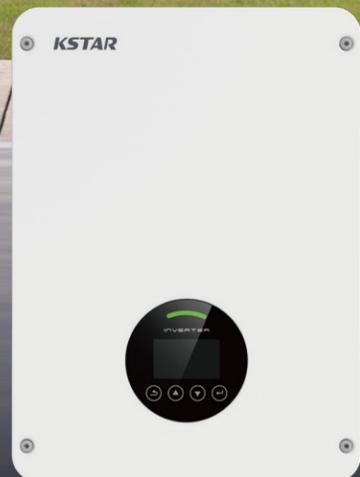
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Max. PV Voltage up to 600 V
DC / AC Ratio up to 1.5
- 

Compatible for Big Capacity PV Panel
WiFi / 4G Plug Optional
- 

Type III 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-G2-M1
Input(DC)				
Max. DC Voltage	600 Vdc			
Nominal Voltage	380 Vdc			
Start Voltage ¹⁾	60 V	80 V	80 V	80 V
MPPT Voltage Range	60 V - 560 V	80 V - 560 V	80 V - 560 V	80 V - 560 V
Number of MPPT	1			
Strings Per MPPT	1			
Max. input Current Per MPPT	13 A			
Max. Short-circuit Current Per MPPT	15.6 A			
Output(AC)				
Nominal AC Output Power	1000 W	1500 W	2000 W	3000 W
Max. AC Apparent Power	1100 VA	1650 VA	2200 VA	3300 VA
Nominal AC Voltage	230V L-N			
AC Grid Frequency Range	50Hz / 60Hz ±5Hz			
Max. Output Current (A)	4.8 A	7.2 A	9.6 A	14.4 A
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			
Anti-islanding Protection	Yes			
Output Over Current Protection	Yes			
DC Reverse Polarity Protection	Yes			
String Fault Detection	Yes			
DC / AC Surge Protection	DC Type III; AC Type III			
Insulation Detection	Yes			
AC Short Circuit Protection	Yes			
General Specifications				
Dimensions W x H x D	350 x 290 x 120 mm			
Weight	7.3 kg	8 kg	8 kg	8 kg
Environment				
Operating Temperature Range	-25°C ~+ 60°C			
Cooling Type	Natural			
Max. Operating Altitude	4000 m			
Max. Operating Humidity	0 - 100%			
AC Output Terminal Type	Quick Connector			
IP Class	IP66			
Topology	Transformer - less			
Communication Interface	RS-485 / WIFI / 4G			
Display	LCD			
Certification & Standard	EN/IEC 62109-1/2; IEC/EN 61000-6-2; IEC/EN 61000-6-4; IEC 62116; IEC 61727; EN 50549-1			

1) Minimum voltage for inverter to start power output.

BluE-G Series

Single Phase / On-grid / 3-8 kW



Max. PV Voltage up to 600 V
DC / AC Ratio up to 1.5



Compatible for Big Capacity PV Panel
WiFi / 4G Plug Optional



Type III 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
Input(DC)					
Max. DC Voltage	600 V				
Nominal Voltage	380 V				
Start Voltage ⁸⁾	120 V	120 V	120 V	120 V	100 V
MPPT Voltage Range	80 V - 560 V	80 V - 560 V	80 V - 560 V	80 V - 560 V	80 V - 540 V
Number of MPPT	2				
Strings Per MPPT	1				
Max. Input Current Per MPPT	15 A	15 A	15 A	15 A	26 A / 16 A ¹⁾
Max. Short-circuit Current Per MPPT	18 A	18 A	18 A	18 A	31 A / 19 A
Output(AC)					
Nominal AC Output Power	3600 W	4000 W	5000 W ²⁾	6000 W	8000 W
Max. AC Apparent Power	3960 VA ³⁾	4400 VA	5500 VA ⁴⁾	6000 VA	8000 VA
Nominal AC Voltage	230V L-N				
AC Grid Frequency Range	50Hz / 60Hz ±5Hz				
Max. Output Current	17 A ⁵⁾	19 A	24 A ⁶⁾	26 A	35 A
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				
Anti-islanding Protection	Yes				
Output Over Current Protection	Yes				
DC Reverse Polarity Protection	Yes				
String Fault Detection	Yes				
DC / AC Surge Protection	DC: Type III / AC: Type III				
Insulation Detection	Yes				
AC Short Circuit Protection	Yes				
General Specifications					
Dimensions W x H x D	380 x 380 x 150 mm				
Weight	10 kg	11 kg	11 kg	11 kg	13 kg
Operating Temperature Range	-25°C ~+ 60°C				
Cooling Type	Natural				Fan cooling
Max. Operating Altitude	≤ 4000 m				
Max. Operating Humidity	0 - 100%				
AC Output Terminal Type	Quick Connector				
IP Class	IP65				
Topology	Transformer less				
Communication	RS-485 / WIFI / 4G				
Display	LCD				
Certification & Standard	EN/IEC 62109-1/2; IEC/EN 61000-6-2; IEC/EN 61000-6-4; IEC 61683; IEC 60068; IEC 60529; IEC 62116; IEC 61727; EN 50549-1; AS 4777.2; NRS 097; VDE-AR-N-4105; VDE 0126-1-1; CEI 0-21; G98/G99; C10/11; UNE 217001; UNE 217002; NB/T 32004-2018; GB/T 19964-2012; INMETRO ⁷⁾				

1) The maximum current of PV1 is 26 A, So PV1 can be expanded into two Strings by using Y-connectors.
 2) Nominal AC output power is 4999 W for Australia and 4600 W for Germany and South Africa.
 3) Max. AC apparent power is 3680 VA for the UK.
 4) Max. AC apparent power is 4999 VA for Australia, 5000 VA for Belgium and 4600 VA for Germany and South Africa.
 5) Maximum output current is 16 A for England.
 6) Maximum output current is 21.7 A for Australia and 20 A for Germany and South Africa.
 7) For BluE-G 8000D: EN/IEC 62109-1/2; IEC/EN 61000-6-2; IEC/EN 61000-6-4; IEC 61683; IEC 60068; IEC 60529; IEC 62116; IEC 61727; INMETRO.
 8) Minimum voltage for inverter to start power output.

BlueGlow Series NEW

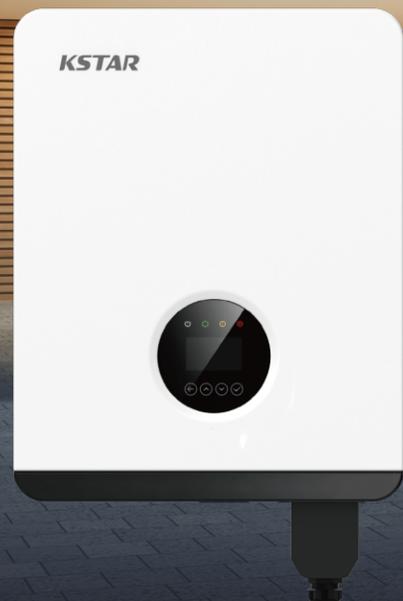
Single Phase / On-grid / 7-12 kW

 Max. PV Voltage up to 600 V
Type II DC / Type III AC SPD

 Reactive Power Control
WiFi / 4G Plug Optional

 DC / AC Ratio up to 1.5
AFCI Optional

 High Efficiency up to 97.5%
Smaller and Lighter

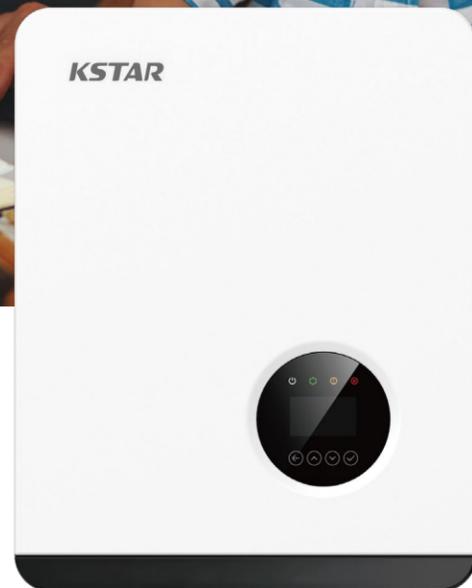


MODEL	G7K	G8K	G9K	G10K	G11K	G12K
Input(DC)						
Max. DC Power	10500	12000	13500	15000	16500	18000
Max. DC Voltage	600 V					
Nominal Voltage	360 V					
Start Voltage	80 V					
MPPT Voltage Range	60 V~ 550 V					
MPPT Voltage Range at full load	170 ~ 480	200 ~ 480	220 ~ 480	250 ~ 480	270 ~ 480	290 ~ 480
Number of MPPT	3					
No. of Strings Per MPPT	1					
No. of Strings Per input	3					
Max. Input Current Per MPPT	15A*3					
Max. Short-circuit Current Per MPPT	20A*3					
Output(AC)						
Nominal AC Output Power	7000 W	8000 W	9000 W	10000 W	11000 W	12000 W
Max. AC Apparent Power	7000 VA	8000 VA	9000 VA	10000 VA	11000 VA	12000 VA
Max. AC Output Power	7000 W	8000 W	9000 W	10000 W	11000 W	12000 W
Nominal AC Voltage	220 V					
AC Grid Frequency Range	50 Hz / 60 Hz (±5Hz)					
Rated Output Current	31.8 A	36.4 A	40.9 A	45.5 A	50 A	54.5 A
Maximum Output Current	31.8 A	36.4 A	40.9 A	45.5 A	50 A	54.5 A
Power Factor(Φ)	0.8 leading - 0.8 lagging					
THDi	3%					
Efficiency						
Max. Efficiency	98.1%					
Euro Efficiency	97.5%					
Protection Devices						
DC Switch	Yes					
Output Over Current Protection	Yes					
Anti-islanding Protection	Yes					
DC Reverse Polarity Protection	Yes					
String Fault Detection	Yes					
Overvoltage category	DC Type II; AC Type III					
Insulation detection	Yes					
AC Short Circuit Protection	Yes					
AFCI protection	Option					
General Specifications						
Dimensions W x H x D	380 x 483 x 161 mm			380 x 483 x 193 mm		
Weight	14.5 kg	15 kg	18 kg			
Operating Temperature Range	-25°C ~+ 60°C					
Cooling Type	Fan Cooling					
Max. Operating Altitude	≤ 4000 m					
Max. Operating Humidity	0 - 100% (No Condensation)					
IP Class	IP66					
Topology	Transformer - less					
Communication	RS-485 / WIFI / GPRS / Bluetooth					
Display	LCD / Bluetooth + App					

* This page is for reference only, please refer to the actual contract. The product will be available in the second quarter of 2024

BluE Series

Three Phase / On-grid / 3-12 kW



Max. PV Voltage up to 1100 V
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	1100 V						
Nominal Voltage	650 V						
Start Voltage ¹⁾	250 V						
MPPT Voltage Range	140 V - 1000 V						
Number of MPPT	2						
Strings Per MPPT	1						
Max. Input Current Per MPPT	15 A						
Max. Short-circuit Current Per MPPT	20 A						
Output(AC)							
Nominal AC Output Power	3000 W	4000 W	5000 W	6000 W	8000 W	10000 W	12000 W
Maximum AC Output Power	3300 VA	4400 VA	5500 VA	6600 VA	8800 VA	11000 VA ²⁾	13200 VA
Nominal AC Voltage	400 V 3L+N						
AC Grid Frequency Range	50 / 60Hz (±5Hz)						
Maximum Output Current	4.8 A	6.4 A	8.0 A	9.6 A	12.8 A	16.0 A ²⁾	19.2A
Power Factor(Φ)	0.8 leading - 0.8 lagging						
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	380 x 483 x 161 mm						
Weight	< 17 kg						
Operating Temperature Range	-25°C ~+ 60°C						
Cooling Type	Natural cooling						
Max. Operating Altitude	4000 m						
Max. Operating Humidity	0 - 100% (No condensation)						
AC Output Terminal Type	Connector						
IP Class	IP66						
Topology	Transformer - less						
Communication	RS-485 / Wifi / 4G						
Display	LCD						
Certification & Standard	EN/IEC 62109-1/2; IEC/EN 61000-6-2; IEC/EN6 1000-6-4; IEC 61683; IEC 60068; IEC 60529; IEC 62116; IEC 61727; EN 50549-1; VDE-AR-N-4105; VDE 0126-1-1; CEI 0-21; G98/G99; C10/11; NB/T 32004-2018; GB/T 19964-2012						

1) Minimum voltage for inverter to start power output.

2) According to the C10/11 of Synergrid, the maximum AC output power is 10 kVA and therefore the maximum AC output current is 14.5A.

BluE Series

Three Phase / On-grid / 15-25 kW

 Max. PV Voltage up to 1100 V
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-M1	BluE-17KT-M1	BluE-20KT-M1	BluE-25KT-M1
Input(DC)				
Max. DC Voltage	1100 V			
Nominal Voltage	650 V			
Start Voltage	250 V			
MPPT Voltage Range	140 V ~ 1000 V			
Number of MPPT Tracker	2			
Strings Per MPPT Tracker	2 / 1	2	2	2
Max. input Current Per MPPT	30 A / 15 A	30 A	30 A	30 A
Max. Short-circuit Current Per MPPT	40 A / 20 A	40 A	40 A	40 A
Output(AC)				
Nominal AC Output Power	15000 W	17000 W	20000 W	25000 W
Max. AC Output Power	16500 VA	18700 VA	22000 VA	27500 VA
Nominal AC Voltage	400 V 3L+N			
AC Grid Frequency Range	50 Hz / 60 Hz ±5Hz			
Max. Output Current	23.9 A	27.1 A	31.9 A	39.9 A
Power Factor (cosΦ)	0.8 leading to 0.8 lagging			
THDi	3%			
Efficiency				
Max. Efficiency	98.6%			
Euro Efficiency	98.2%	98.3%	98.3%	98.3%
Protection Devices				
DC Switch	Yes			
Anti-islanding Protection	Yes			
Output Over Current 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	380 x 483 x 193 mm			
Weight	20.7 kg			
Operating Temperature Range	-25°C ~+ 60°C			
Cooling Type	Fan Cooling			
Max. Operating Altitude	4000 m			
Max. Operating Humidity	0 - 100% (No condensation)			
AC Output Terminal Type	Connector			
IP Class	IP66			
Topology	Transformer - less			
Communication Interface	RS-485 / WIFI / 4G			
Display	LCD			
Certification & Standard	EN/IEC 62109-1/2; IEC/EN 61000-6-2; IEC/EN 61000-6-4; IEC 61683; IEC 60068; IEC 60529; IEC 62116; IEC 61727; EN 50549-1; VDE-AR-N-4105; VDE 0126-1-1; CEI 0-21; G99; C10/11; NB/T 32004-2018; GB/T 19964-2012			

GreenFlow (Coming Soon)

Single Phase / Wall-mounted or Pedestal-mounted / 7 kW

Effortless User Experience

- ▶ Authenticate, start, and stop charging sessions using an RFID charge card, or remotely via the app.
- ▶ 4.3" Easy-to-understand touch screen
- ▶ Over-the-air (OTA) updates supported

Secure and Robust

- ▶ Suitable for outdoor use (IP65)
- ▶ Residual current detection embedded
- ▶ Built-in heat management ensures maximum charging speed up to 50°C

Smart Charging

- ▶ Set charging schedules
- ▶ Smart energy integration
- ▶ Compatible with most electric vehicles



MODEL	CAS7
Power Supply	1P+N+PE
Input/output Power Rating	7 kW
Input/output Voltage	230 VAC ±15%
Input/output Current	Up to 32 A
Frequency	50 / 60 Hz
Cable Length	4.5 m
Connector Type	IEC 62196 type 2 plug
Dimension(WxDxH)	276 x 100 x 380 mm
LED Indicator	Green / Blue / Red
LCD Display	4.3" full color touchscreen
RFID Reader	MifareISO / IEC 14443 A
Start Mode	RFID card / App
Emergency Stop	Yes
WiFi+Bluetooth	Yes
Ethernet/4G	Optional
OCPP	OCPP 1.6 Json
Energy Meter	AC energy meter
Power Measurement Accuracy	+/- 1.0%
Residual Current Detection	AC 30 mA + DC 6 mA
Ingress Protection	IP65
Electrical Protection	Over voltage protection, under voltage protection, overload protection, short circuit protection, open circuit protection, leakage protection, grounding protection, over temperature protection, surge protection.
Certification Standard	IEC 61851-1; IEC 62196
Installation	Wall-mounted or pedestal-mounted
Operating Temperature Range	-30°C ~+ 50°C
Operating Humidity	5% - 95% (non-condensing)
Operating Altitude	< 3000 m
Software	OTA updates

GreenFlow (Coming Soon)

Three Phase / Wall-mounted or Pedestal-mounted / 22 kW

Effortless User Experience

- ▶ Authenticate, start, and stop charging sessions using an RFID charge card, or remotely via the app.
- ▶ 4.3" Easy-to-understand touch screen
- ▶ Over-the-air (OTA) updates supported

Secure and Robust

- ▶ Suitable for outdoor use (IP55)
- ▶ Residual current detection embedded
- ▶ Built-in heat management ensures maximum charging speed up to 50°C

Smart Charging

- ▶ Set charging schedules
- ▶ Smart energy integration
- ▶ Compatible with most electric vehicles

MODEL	CAT22
Power Supply	3P+N+PE
Input/output Power Rating	22 kW
Input/output Voltage	400 VAC ±15%
Input/output Current	Up to 32 A
Frequency	50 / 60 Hz
Cable Length	4.5 m
Connector Type	IEC 62196 type 2 plug
Dimension(WxDxH)	276 x 100 x 380 mm
LED Indicator	Green / Blue / Red
LCD Display	4.3" full color touchscreen
RFID Reader	MifareISO / IEC 14443 A
Start Mode	RFID card / App
Emergency Stop	Yes
WiFi+Bluetooth	Yes
Ethernet/4G	Optional
OCPP	OCPP 1.6 Json
Energy Meter	AC energy meter
Power Measurement Accuracy	+/- 1.0%
Residual Current Detection	AC 30 mA + DC 6mA
Ingress Protection	IP55
Electrical Protection	Over voltage protection, under voltage protection, overload protection, short circuit protection, open circuit protection, leakage protection, grounding protection, over temperature protection, surge protection.
Certification Standard	IEC 61851-1; IEC 62196
Installation	Wall-mounted or pedestal-mounted
Operating Temperature Range	-30°C ~+ 50°C
Operating Humidity	5% - 95% (non-condensing)
Operating Altitude	< 3000 m
Software	OTA updates

KSM-SW1-S Stick Logger (WiFi)

By collecting operating data and power generation of inverter, stick logger (WiFi) can run a long-term and efficient monitoring of PV system. Meanwhile, remote monitoring cloud platform provides powerful data support for the logger. The WiFi module is integrated inside the logger which enables transmitting the data to the monitoring platform via WiFi.



-  Remote Control
-  Remote Upgrade
-  Plug and Play
-  7/24 Monitoring

MODEL	LSW-3-C
Wireless Parameters	
Working Frequency	2.412 GHz ~ 2.484 GHz
Transmitting Power	802.11b: +14+/-2dBm(@11Mbps)
	802.11g: +14+/-2dBm(@54Mbps)
	802.11n: +13+/-2dBm(@HT20,MCS7)
Antenna Option	External WiFi Stick Antenna
Hardware Parameters	
Data Interface	RS-485
Working Voltage	DC 5 V - DC 12 V
Max. Working Voltage	DC 15 V
Working Power	1.5 W
Indicator Light	One connected to inverter
	One connected to router
	One heartbeat indicator light
Data Storage	Default: 2MBYTE FLASH
Working Temperature	-30°C ~ + 70°C
Working Humidity	Relative humidity: 10% - 90%, No Condensation
Storage Temperature	-45°C ~ + 90°C
Storage Humidity	< 40%
IP Grade	IP65
External Interface	DB 9
Software AT+Instruction set Parameters	
Number of Connections	One
Serial Communication Rate	Default: 9600 bps (1200 - 115200 bps Optional)
Data Transmission Interval	Default: 5 mins (1 - 15 mins Optional)
Configuration	AT+Instruction Set
	Localweb Configuration
	Remote Server
Firmware upgrade	Local Web Upgrade
	Remote Update
Working Mode	AP+STA
Others	Real-time Control, Data Resuming

* It is recommended to use Stick logger (WiFi) for residential system. And Stick Logger (Ethernet/4G) is optional.

SDM630MCT40mA Smart Meter

DIN Rail Energy Meter for Single and Three Phase Electrical Systems

- ▶ Measures kWh kVAh, kW, kVA, P, F, PF, Hz, dmd, V, A, THD, etc.
- ▶ Bi-directional measurement IMP & EXP
- ▶ Two pulse outputs
- ▶ RS-485 Modbus
- ▶ Din rail mounting 35mm
- ▶ 40 mA CT connection
- ▶ Better than Class 1 / B accuracy



MODEL	SDM630MCT40mA
Measurement Accuracy	
Type of Measurement	RMS including harmonics on three phase AC system (3P,3P+N)
Power	0.5% of range maximum
Active Energy	IEC 62053 - 22 Class 0.5S, IEC 62053 - 21 Class 1.0
Reactive Energy	IEC 62053-23 Class 2
Frequency	0.2% of mid-frequency
Current	0.5% of range maximum
Voltage	0.5% of range maximum
Power Factor	1% of unity (0.01)
Input	
CT Secondary	40 mA
CT Primary	1 - 9999 A
Rated Voltage (Un)	230 V LN 120 V L-N
Operational Voltage	80% ~ 120% of Un
Output	
SDM 630MCT mV/mA Series	2 Pulse Outputs + RS-485 Modbus
RS-485 Modbus Communications	
Communication Address	1 ~ 247
Transmission Distance	1000 m Maximum
Transmission Speed	1200 bps ~ 38400 bps
Parity	None (default), Odd, Even
Stop Bits	1
Response Time	< 100 ms

* SDM630MCT40mA smart meter is recommended to be used along with residential string inverters and ESS hybrid inverters.

** It has included three 120A/40mA Current Transformers. For system larger than 80 kW, users need to purchase larger capacity CT that meets the following requirements:

1. The selected CT's primary rating should be larger than the maximum current passing through the system's AC busbar.
2. Maximum Current = system capacity / 230 / 3

*** Please consult Kstar for more details.

One click away from 24/7 technical support

Remote Energy Monitoring and Analytics

Fault Detection and Maintenance

Grid Interaction and Net Metering

Enhanced System Lifespan

Integration with Smart Home Systems

Comprehensive Data Visualization

Detailed Configuration Settings

Collaborative Monitoring

Extended Historical Data Analysis



KSTAR SPIRIT

At KSTAR, we understand that technical service is the cornerstone of a reliable and efficient solar solution. Our commitment to unparalleled technical support ensures that your solar investment operates at peak performance throughout its lifecycle.

**Illuminate Tomorrow:
Technical Support Today,
Tomorrow, Always.**





01 Residential ESS Project
in Europe



02 Residential ESS Project
in Europe



03 Residential Solar Project
in Brazil



04 Residential ESS Project
in Belgium



05 Residential Solar Project in Brazil



06 Residential ESS Project in Italy



07 Residential Solar Project in Brazil



08 Residential ESS Project in Italy



09 Residential ESS Project in Netherlands



10 Residential ESS Project in Bulgaria

