

Serving inspiration with every generation



KSTAR
Powering the Future

Thailand@kstar.com

Ms. olivia(Southeast Asia Senior manager)
E: olivia@kstar.com Tel: +86 130 2228 9501 (WhatsApp / Wechat)

Mr. Pusit(Thailand country manager)
E: pusit@kstar.com Tel: +66 89 133 9090

Address: Chic Distric Ram 53, 388/87 Soi Ramkhamhaeng 53, Phlabphla, Wang Thonglang, Bangkok 10310

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KSTAR PV and ESS Solutions for Thailand



www.kstar.com www.kstar.eu

2025

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

National-level Green Factory

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

2024
Construction of the High-end New Energy and Energy Storage Industrial Base



Serving inspiration with every generation



180+

Countries & Regions

60GW

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 60GW of KSTAR products already installed globally.

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

BluE-S Series Residential ESS

Single Phase / All-in-one Hybrid System / 5 kW

Save Your Energy Bill

- ▶ Optimized Time-of-use Profile
- ▶ 10000 Cycles Lifespan
- ▶ VPP Ready

Whole Home Energy Solution

- ▶ Support On-grid and Off-grid Switching
- ▶ AC-coupling or DC-coupling System
- ▶ Backup Power Support

Comprehensive Safety

- ▶ Alarm and Protection
- ▶ Online Monitoring
- ▶ Compliant with Global Grid Standards



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
Dimensions (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. 4
Usable Capacity	4.6 kWh	Capacity	100 / 200 / 300 / 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		

*All specifications are subject to change without prior notice.

Hybrid Inverter Model	BluE-S 5000D
PV String Input	
Recommended Max. PV Array Input Power @STC	7.5 kWp
Max. DC Voltage	580 V
Nominal Voltage	400 V
MPPT Voltage Range	80 ~ 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	5000 W
Max. AC Apparent Power	7360 VA (from grid)
Max. AC Output Power	5000 W
Nominal AC Voltage	230 Vac
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Max. Output Current	22 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	100 A
Max. Discharging Current	100 A
Battery Capacity	100 ~ 400 Ah
Charging Strategy for Li-ion Battery	Depend on the BMS
AC Output (Backup)	
Max. Output Current	5000 VA
Peak Output Apparent Power	6900 VA 10sec
Max. Output Apparent Power	20 A
Nominal Output Voltage	230 V
Nominal Output Frequency	50 Hz / 60 Hz
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
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 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; MEA; PEA

1) Minimum voltage for inverter to start power output.

BluE-S Series Residential ESS

Three Phase / All-in-one Hybrid System / 10 kW

Save Your Energy Bill

- ▶ Optimized Time-of-use Profile
- ▶ 10000 Cycles Lifespan
- ▶ VPP Ready

Whole Home Energy Solution

- ▶ Support On-grid and Off-grid Switching
- ▶ AC-coupling or DC-coupling System
- ▶ Optional Generator Connection

Comprehensive Safety

- ▶ Alarm and Protection
- ▶ Online Monitoring
- ▶ Compliant with Global Grid Standards



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
Dimensions (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		

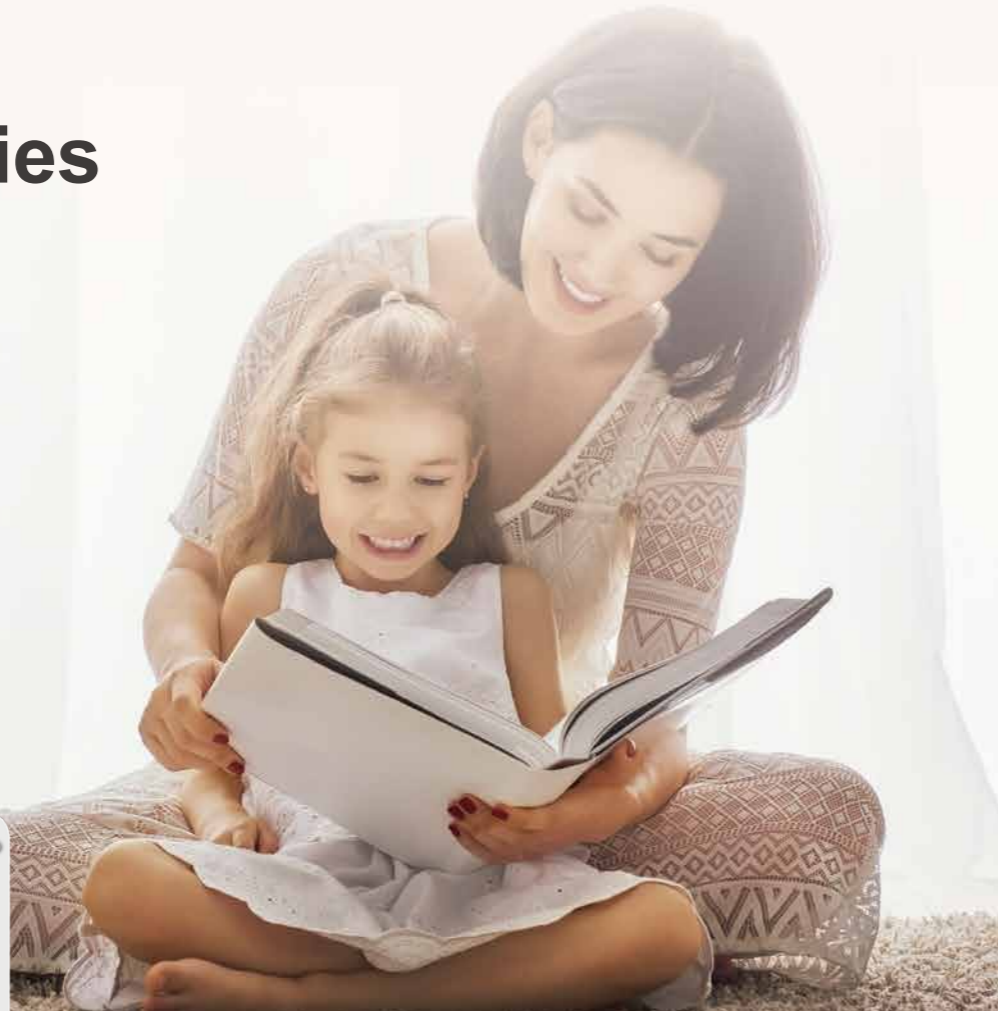
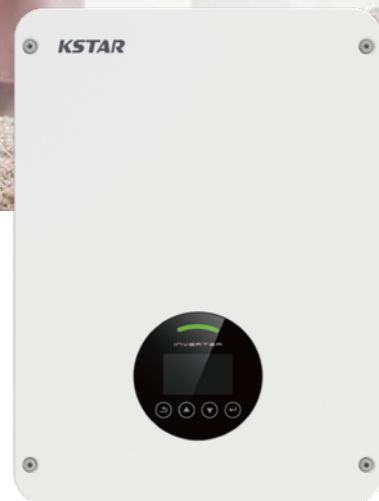
*All specifications are subject to change without prior notice.


Hybrid Inverter Model	E10KT
PV String Input	
Recommended Max. PV Array Input Power @STC	20 kWp
Max. Continuous PV Input Power	20 kW
Max. DC Voltage	1100 V
Nominal Voltage	720 V
MPPT Voltage Range	140 ~ 1000 V
MPPT Voltage Range (Full Load)	420 ~ 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	10 kW
Max. AC Apparent Power	11 kVA
Nominal AC Voltage	400 Vac
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Nominal Output Current	14.5 A
Max. Output Current	16 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	200 A
Battery Capacity	200 / 400 / 600 / 800 Ah
AC Output (Backup)	
Nominal AC Output Power	9.2 kW
Max. AC Output Power	10 kVA
Nominal Output Current	13.3 A
Max. Output Current	14.5 A
Nominal Output Voltage	400 V
Nominal Output Frequency	50 Hz / 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; MEA; PEA


¹⁾ Minimum voltage for inverter to start power output.

BluE-G Series


Single Phase / On-grid / 3 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
IP66 Protection

 High Efficiency up to 97.6%
Smaller and Lighter

MODEL	BluE-G 3000S-G2
Input (DC)	
Max. DC Voltage	600 V
Nominal Voltage	380 V
Start Voltage ¹⁾	80 V
MPPT Voltage Range	80 ~ 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	3000 W
Max. AC Apparent Power	3300 VA
Nominal AC Voltage	230 V L-N
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Max. Output Current (A)	14.4 A
Power Factor (cosΦ)	0.8 (Leading) ~ 0.8 (Lagging)
THDi	< 3%
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	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
AFCI Function	Optional
PID Recovery	Optional
General Specifications	
Dimensions (W x H x D)	350 x 290 x 120 mm
Weight	8 kg
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	Transformerless
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; MEA; PEA

1) Minimum voltage for inverter to start power output.

BluE-G Series

Single Phase / On-grid / 5 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

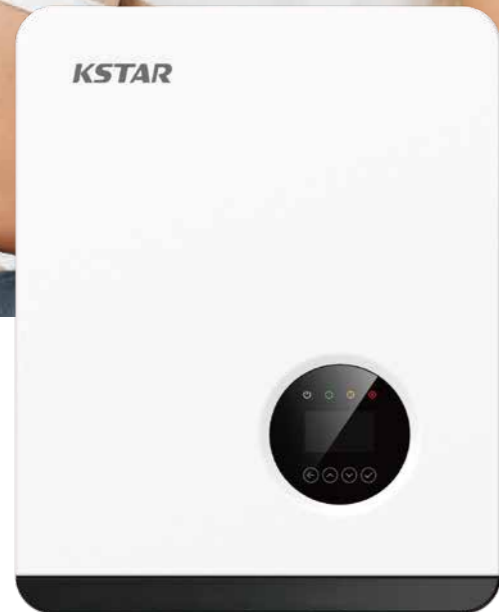


MODEL	BluE-G 5000D-M1
Input (DC)	
Max. DC Voltage	600 V
Nominal Voltage	380 V
Start Voltage ¹⁾	120 V
MPPT Voltage Range	80 ~ 560 V
Number of MPPT	2
Strings Per MPPT	1
Max. Input Current Per MPPT	15 A
Max. Short-circuit Current Per MPPT	18 A
Output (AC)	
Nominal AC Output Power	5000 W
Max. AC Apparent Power	5500 VA
Nominal AC Voltage	230 V L - N
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Max. Output Current	24 A
Power Factor (cosΦ)	0.8 (Leading) ~ 0.8 (Lagging)
THDi	< 3%
Efficiency	
Max. Efficiency	98.3%
Euro Efficiency	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
AFCI Function	Optional
PID Recovery	Optional
General Specifications	
Dimensions (W x H x D)	380 x 380 x 150 mm
Weight	11 kg
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	IP65
Topology	Transformerless
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; MEA; PEA

1) Minimum voltage for inverter to start power output.

BluE Series

Three Phase / On-grid / 10 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 1.3
IP66 Protection



High Efficiency up to 98.6%
Smaller and Lighter


MODEL	BluE-10KT-M1
Input (DC)	
Max. DC Voltage	1100 V
Nominal Voltage	650 V
Start Voltage ¹⁾	250 V
Number of MPPT	140 ~ 1000 V
Strings Per MPPT	2
MPPT Voltage Range	1
Max. Input Current Per MPPT	15 A
Max. Short-circuit Current Per MPPT	20 A
Output (AC)	
Nominal AC Output Power	10000 W
Maximum AC Output Power	11000 VA
Nominal AC Voltage	400 V 3L+N
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Maximum Output Current	16.0 A
Power Factor (Φ)	0.8 (Leading) ~ 0.8 (Lagging)
THDi	3%
Efficiency	
Max. Efficiency	98.6%
Euro Efficiency	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
AFCI Function	Optional
PID Recovery	Optional
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	Transformerless
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; VDE-AR-N-4105; VDE 0126-1-1; CEI 0-21; G98/G99; C10/11; NB/T 32004-2018; GB/T 19964-2012; MEA; PEA

1) Minimum voltage for inverter to start power output.


BluE Series

Three Phase / On-grid / 20 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 1.3
IP66 Protection

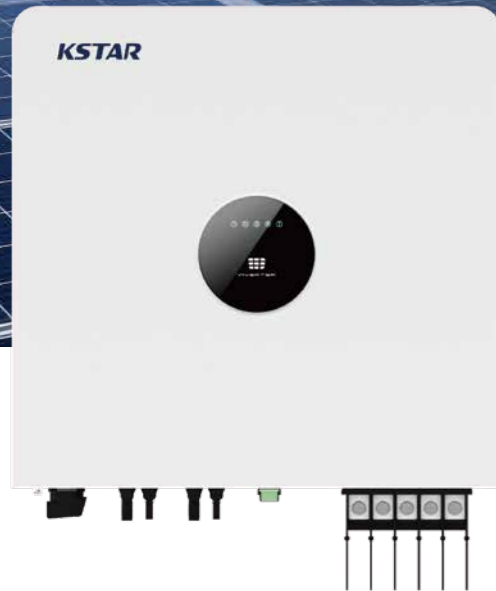
 High Efficiency up to 98.6%
Smaller and Lighter





MODEL	BluE-20KT-M1
Input (DC)	
Max. DC Voltage	1100 V
Nominal Voltage	650 V
Start Voltage	250 V
MPPT Voltage Range	140 ~ 1000 V
Number of MPPT Tracker	2
Strings Per MPPT Tracker	2
Max. input Current Per MPPT	30 A
Max. Short-circuit Current Per MPPT	40 A
Output (AC)	
Nominal AC Output Power	20000 W
Max. AC Output Power	22000 VA
Nominal AC Voltage	400 V 3L+N
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Max. Output Current	31.9 A
Power Factor (cosΦ)	0.8 (Leading) ~ 0.8 (Lagging)
THDi	3%
Efficiency	
Max. Efficiency	98.6%
Euro Efficiency	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
AFCI Function	Optional
PID Recovery	Optional
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	Transformerless
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; MEA; PEA


G Series


Three Phase / On-grid / 60 kW



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

 Reactive Power Control
WiFi / 4G Plug Optional

 DC / AC Ratio up to 1.5
IP66 Protection


 High Efficiency up to 98.6%
Smaller and Lighter


MODEL	G60KT
Input (DC)	
Max. DC Voltage	1100 V
Nominal Voltage	650 V
Start Voltage	250 V
MPPT Voltage Range	200 ~ 1000 V
Number of MPPT	4
Strings Per MPPT	2
Max. input Current Per MPPT	32 A
Max. Short-circuit Current Per MPPT	48 A
Output (AC)	
Nominal AC Output Power	60000 W
Max. AC Apparent Power	66000 VA
Nominal AC Voltage	230 / 400 V, 3P+N+PE
AC Grid Frequency Range	50 Hz / 60 Hz (±5Hz)
Max. Output Current	100 A
Power Factor (cosΦ)	0.8 (Leading) ~ 0.8 (Lagging)
THDi	3%
Efficiency	
Max. Efficiency	98.5%
Euro Efficiency	98.2%
Protection Devices	
DC Switch	Yes
Output Over Current Protection	Yes
Anti-islanding Protection	Yes
DC Reverse Polarity Protection	Yes
String Fault Detection	Optional
DC / AC Surge Protection	Type II
Residual Current Monitoring	Yes
AC Short Circuit Protection	Yes
General Specifications	
Dimensions (W x H x D)	548 x 540 x 289 mm
Weight	51 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	OT terminal
IP Class	IP66
Topology	Transformerless
Communication	RS-485 / WiFi / 4G
Display	LCD
Certification & Standard	EN/IEC 62109-1; EN/IEC 62109-2; IEC/EN 61000-6-1; IEC/EN 61000-6-3; IEC/EN 61000-6-2; IEC/EN 61000-6-4; IEC 61683; IEC 60068; IEC 60529; IEC 62116; IEC 61727; EN 50549-1; NC RfG; VDE-AR-N-4105; VDE 0126; CEI 0-21; MEA; PEA


BlueKernel NEW


Three Phase / On-grid / 125 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 1.5
IP66 Protection

 High Efficiency up to 98.7%
Smaller and Lighter

 PID Recovery optional
AFCI optional

MODEL	G125KT7
Input (DC)	
Max.DC Voltage	1100 V
Max.Input Current Per MPPT	45 A
Max.Short-circuit Current Per MPPT	60 A
Start Voltage	350 V
MPPT Voltage Range	200 ~ 1000 V
Nominal Voltage	650 V
Number of MPPT	8
Strings Per MPPT	2
Output (AC)	
Nominal AC Output Power	125 kW
Max. AC Apparent Power	125 kVA
Nominal AC Voltage	230 V / 400 V, 3W +PE, 3W+N+PE
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)
Max. Output Current	181.2 A
Power Factor (cosΦ)	0.8 (Leading) ~ 0.8 (Lagging)
THDi	< 3% (Nominal Power)
Efficiency	
Max. Efficiency	98.7%
Euro Efficiency	98.5%
Protection Devices	
DC Switch	Yes
Anti-islanding Protection	Yes
Output Over Current Protection	Yes
DC Reverse Polarity Protection	Yes
String Fault Detection	Optional
DC / AC Surge Protection	DC Type II; AC Type II
AC Short Circuit Protection	Yes
AFCI Function	Optional
Night SVG Function	Optional
PID Recovery	Optional
Insulation Detection	Yes
Residual Current Monitoring	Yes
General Specifications	
Dimensions (W x H x D)	965 x 700 x 355 mm
Weight	85 kg
Operating Temperature Range	-30 ~ 60°C
Cooling Type	Fan Cooling
Max. Operation Altitude	5000 m (> 4000 m Derating)
Max. Operating Humidity	0 ~ 100%
IP Class	IP66
Noise	≤ 80 dB
Topology	Transformerless
Communication	RS-485 / PLC / WiFi / 4G
Display	LED , Buletooth + APP
Certification & Standard	IEC 62109-1/-2; EN IEC 61000-6-1/2/3/4; EN IEC 61000-3-11/12; EN IEC 62920; IEC 61727; IEC 62116; IEC 61683; IEC 60068-2-1/2/14/30; EU RoHS Directive; EN 50549-1/2; EN 50549-10; CEI 0-16; NC RFG; C10/11; UNE 217001; UNE 217002; NTS V2.1; MEA; PEA

BluePulse Series NEW

KAC50DP-BC100DE / KAC50DP-BC107DE / KAC50DP(2)-BC197DE ¹⁾

Safe & Reliable

- ▶ CATL LFP Battery Cell
- ▶ Double Fire Suppression System Design

Economical & Efficient

- ▶ Save CapEx, Expanding as Required
- ▶ Efficient and Energy-saving HVAC Design

Simple & User-friendly

- ▶ Pre-installed in Factory for Easy Installation on site
- ▶ Integrated BMS / EMS, Suitable for Various Applications
- ▶ Effortless Operation, Cloud Control



Outdoor Battery Cabinet Parameters

Technical Parameters	BC100DE	BC107DE	BC197DE
Battery Type	LFP		
Manufacturer	CATL		
Cell Type	100 Ah	280 Ah	280 Ah
Battery Module Capacity	5.12 kWh	17.92 kWh	17.92 kWh
Number of Modules	20	6	11
Total Battery Capacity	102.4 kWh	107.52 kWh	197.12 kWh
Nominal Voltage	512 V	384 V	704 V
Operating Voltage Range	456 ~ 576 V	342 ~ 432 V	627 ~ 792 V
Charge / Discharge Rate	Max. 0.5 C		
DoD	90%		
General Parameters			
Dimensions (W x H x D)	1100 x 2380 x 1100 mm	1050 x 2000 x 1366 mm	1300 x 2380 x 1200 mm
Weight	< 1.5 T	< 1.45 T	< 2.5 T
Installation Site	Outdoor		
IP Protection	IP54		
Anti Corrosion Level	C4		
Operation Humidity	5% ~ 95% (No Condensing)		
Operation Temperature	-30°C ~ +50°C		
Max. Operation Altitude	≤ 3000 m		
Communication Port	Ethernet; CAN		
Communication Protocol	CAN; TCP		
Cooling Method	Air Conditioner		
Certificates	UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4		

1) The BC197DE battery cabinet supports both a 0.25 C configuration with a single KAC50DP and a 0.5 C configuration with two KAC50DP units.

Hybrid Inverter Parameters

Product Specifications	KAC50DP
PV Side	
Max. Input Voltage	1000 V
MPPT Voltage Range	350 ~ 800 V
Max. Current per MPPT	36 A
Number of MPPT	3
Number of Inputs per MPPT	2
Battery Side	
Max. Input Voltage	750 V
Min. Input Voltage	350 V
DC Voltage at Nominal Operation	500 ~ 750 V
Max. DC Current	55 A x 2
Max. DC Input Power	55 kW ¹⁾
Number of DC Inputs	2
AC Side (On Grid)	
Nominal AC Output Power	50 kW
Max. AC Output Power	55 kVA
Max. AC Current	80 A
Nominal AC Voltage	400 V
AC Voltage Range	340 ~ 440 V
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz (±5 Hz)
THDi	< 3% (100% Load)
Adjustable PF Range	-1 (Lagging) ~ 1 (Leading)
AC Side (Off Grid)²⁾	
Nominal AC Voltage	400 V
THDv	< 3% (Linear Load)
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz
Nominal AC Output Power	50 kW
Max. AC Output Power	55 kVA
Efficiency	
Max. Efficiency	97.5%
Protection	
Reverse Connection Protection	Yes
DC Switch	Yes
Over-Temperature Protection	Yes
Grid Monitoring / Earthing Fault Detection	Yes
Insulation Monitoring	Yes
DC / AC Surge Protection	DC Type II; AC Type III
General Parameters	
Dimensions (W x H x D)	650 x 715 x 325 mm
Weight	76 kg
Topology	Transformerless
IP Protection	IP65
Operation Temperature Range	-25 ~ 60°C (> 45°C Derating)
Operation Humidity Range	0 ~ 100% (No Condensing)
Cooling Method	Intelligent Air Cooling
Max. Operation Altitude	3000 m
Communication Port	RS-485 / CAN
Certificates	EN IEC 62109-1/2; IEC EN 62477-1; EN IEC 61000-6-2/4; EN IEC 61000-3-11; EN 61000-3-12; IEC 60068-2-1/2/14/30/52; IEC 61683; IEC 61727; IEC 62116; IEC 60529; C10/11; CEI 0-21; EN 50549-1; DIN VDE 0126-1-1; VDE-AR-N 4105; UNE 217001; MEA; PEA

1) When KAC50DP is used with BC107DE, Max. charge and discharge power is 40 kW.

2) For on / off-grid switching application, STS100D or STS250D automatic switching cabinet is needed.

BluePulse Series

KAC100DH / KAC125DH - BC215DE / BC233DE

Safe & Reliable

- ▶ CATL LFP Battery Cell
- ▶ Double Fire Suppression System Design

Economical & Efficient

- ▶ Save CapEx, Expanding as Required
- ▶ Efficient and Energy-saving HVAC Design

Simple & User-friendly

- ▶ Pre-installed in Factory for Easy Installation on-site
- ▶ Integrated BMS / EMS, Suitable for Various Applications
- ▶ Effortless Operation, Cloud Control



Outdoor Battery Cabinet Parameters

Technical Parameters	BC215DE	BC233DE
Battery Type	LFP	
Battery Module Capacity	17.92 kWh	
Number of Modules	12	13
Total Battery Capacity	215 kWh	233 kWh
Nominal Voltage	768 V	832 V
Operating Voltage Range	682 ~ 864 V	741 ~ 936 V
Charge / Discharge Rate	0.5 C	
DoD	90%	
General Parameters		
Dimensions (W x H x D)	1300 x 2380 x 1442 mm	
Weight	< 2.5 T	
Installation Site	Outdoor	
IP Protection	IP54	
Anti Corrosion Level	C4	
Operation Humidity	5% ~ 95% (No Condensing)	
Operation Temperature	-30°C ~ +50°C	
Max. Operation Altitude	≤ 3000 m	
Communication Port	Ethernet; CAN	
Communication Protocol	CAN; TCP	
Cooling Method	Air Conditioner	
Certificates	UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4	

Energy Storage Inverter Parameters

Product Specifications	KAC100DH	KAC125DH
Battery Side		
Max. Input Voltage	1500 V	
Min. Input Voltage	600 V	
DC Voltage at Nominal Operation	650 ~ 1400 V	
Max. DC Current	187 A	233.8 A
Max. DC Input Power	112 kW	140 kW
Number of DC Inputs	1	
AC Side (On Grid)		
Nominal AC Output Power	100 kW	125 kW
Max. AC Output Power	110 kW	137.5 kW
Max. AC Current	159 A	199 A
Nominal AC Voltage	400 Vac, 3P + PE (N)	
AC Voltage Range	400 Vac, (-15% + 10%)	
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz (±5 Hz)	
THDi	≤ 3% (Rated Power)	
Adjustable PF Range	> 0.99	
AC Side (Off Grid)¹⁾		
Nominal AC Voltage	400 Vac, 3P + PE (N)	
THDv	< 1.5% (Resistive Load)	
Nominal Grid Frequency / Frequency Range	50 Hz / 60 Hz (±5 Hz)	
Nominal AC Output Power	100 kW	125 kW
Max. AC Output Power	110 kVA	137.5 kVA
Efficiency		
Max. Efficiency	> 98%	
Protection		
Reverse Connection Protection	Yes	
DC Switch	Yes	
Over-Temperature Protection	Yes	
Insulation Monitoring	Yes	
DC / AC Surge Protection	Type II (DC side); Type II (AC side)	
General Parameters		
Dimensions (W x H x D)	650 x 952 x 310 mm	
Installation	Wall Mounted / Plug in	
Weight	93 kg	
Topology	Transformerless	
IP Protection	IP66	
Anti Corrosion Level	C4	
Operation Temperature Range	-30°C ~ 60°C (> 45°C Derating)	
Operation Humidity Range	0 ~ 100% (No Condensing)	
Cooling Method	Intelligent Air Cooling	
Max. Operation Altitude	4000 m (> 3000 m Derating)	
Communication Port	RS-485 / CAN	
Certificates	EN 50549-1:2019; EN 50549-2:2019; IEC 61000-6-2/4; IEC 62477-1: 2012; NC RFG; C10/C11; GB/T 34120; GB/T 34133:2023	

1) For off-grid application, STS250D automatic switching cabinet is needed.

BlueWave NEW

Three Phase / 1500 Vdc / 350 kW

Lower CapEx and OpEx

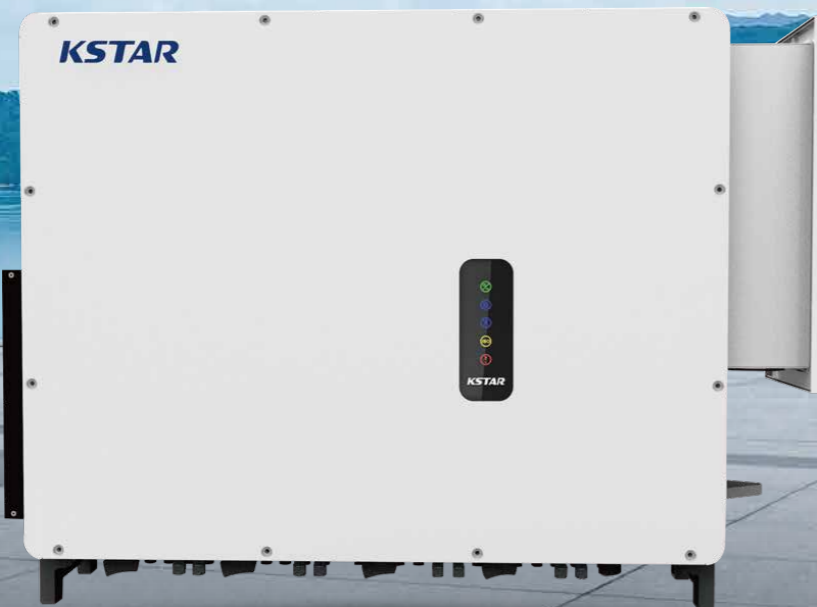
- ▶ Power line communication (PLC)
- ▶ Night SVG function
- ▶ Supports both Al and Cu cable

Maximize Solar Yield

- ▶ 12 independent MPPT
- ▶ Max. efficiency up to 99%
- ▶ Smart I-V curve scan

Improved Safety

- ▶ Type II DC & AC SPD
- ▶ PID Recovery optional
- ▶ AFCI optional

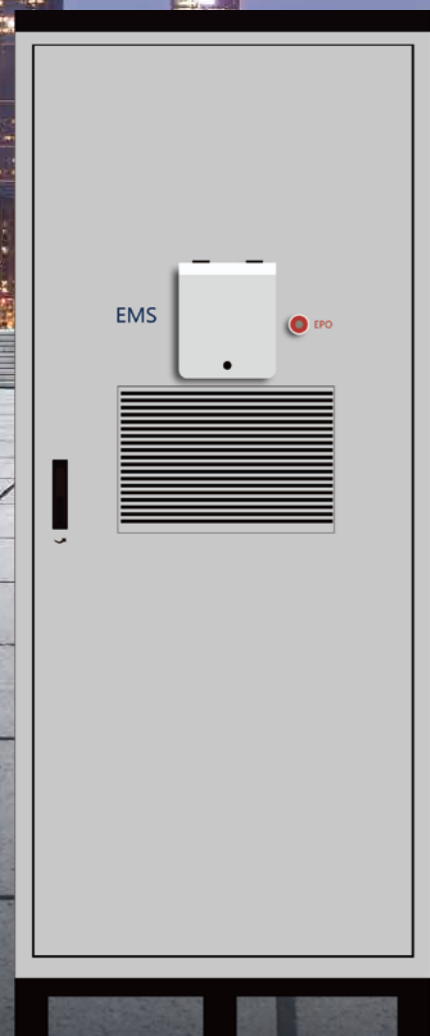


MODEL	G350KTHC	G350KTH
Input(DC)		
Max. DC Voltage	1500 V	
Max. Input Current Per MPPT	30 A	40 A
Max. Short-circuit Current Per MPPT	45 A	60 A
Start Voltage	650 V	
MPPT Voltage Range	500 ~ 1500 V	
Number of Strings	32	24
Number of MPPT	16	12
Strings Per MPPT	2	
Output(AC)		
Nominal AC Output Power	350 kW	
Max. AC Apparent Power	352 kVA	
Nominal AC Voltage	800 V , 3W+PE	
Nominal Frequency	50 Hz / 60 Hz (±5 Hz)	
Frequency Range	45 ~ 55 Hz / 55 ~ 65 Hz	
Max. Output Current	254 A	
Power Factor (cosΦ)	0.8 (Leading) ~ 0.8 (Lagging)	
THDi	< 3% (Nominal Power)	
Efficiency		
Max. Efficiency	99%	
Protection Devices		
DC Switch	Yes	
Anti-islanding Protection	Yes	
Over Current Protection	Yes	
DC Reverse Polarity Protection	Yes	
String Fault Detection	Yes	
DC / AC Surge Protection	Type II	
AC Short Circuit Protection	Yes	
Residual Current Detection	Yes	
AFCI Function	Optional	
PID Recovery	Optional	
Night SVG Function	Optional	
General Specifications		
Dimensions (W x H x D)	1180 x 860 x 362 mm	
Weight	125 kg	
Operating Temperature Range	-30 ~ 60°C	
Cooling Type	Fan Cooling	
Max. Operation Altitude	5000 m (> 4000 m Derating)	
Max. Operating Humidity	0 ~ 100%	
AC Output Terminal Type	OT terminal	
IP Class	IP66	
Noise (dB)	≤ 75 dB	
Topology	Transformerless	
Communication	RS-485 / PLC	
Display	LED , Buletooth+APP	

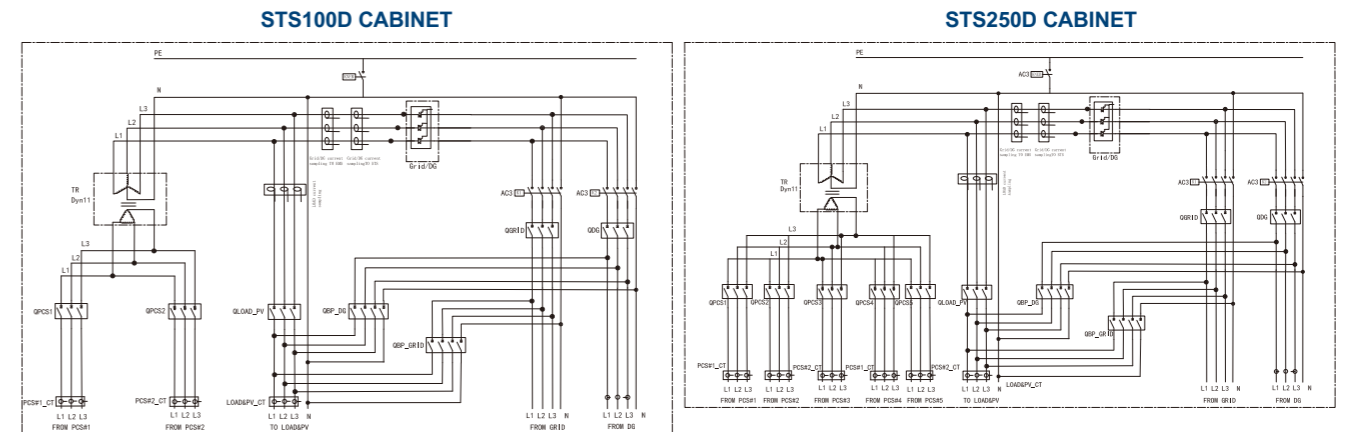
STS100D / STS250D NEW Automatic Switching Cabinet

On-grid / Off-grid / 100–250 kVA

- ▶ On & Off-grid switching < 20 ms, support backup Load
- ▶ Integrated EMS, supports multiple operation modes
- ▶ Integrated Off-grid isolation transformer
- ▶ Supports multi-source access to Grid & PCS & DG power



Block Diagram:



Parameter	STS100D	STS250D
Rated Voltage	400 V	400 V
Rated Current	217 A	536 A
PCS Rated Current	144 A	360 A
Rated Frequency	50 / 60 Hz	50 / 60 Hz
PCS Rated Power	100 kVA	250 kVA
Max. Grid Input Power	150 kVA	370 kVA
Switch Time Between On / Off-grid	≤ 20 ms	≤ 20 ms
PCS Input Breaker	125 A x 2	125A x 5 / 250A x 2*
Max. Grid Input Breaker	250 A	630 A
DG Input Breaker	250 A	630 A
Load Breaker	250 A	630 A
Grid / DG Bypass Breaker	250 A	630 A x 2
Isolation Transformer	100 kVA	250 kVA
Lightning Protection	Type II	Type II
Protection Degree	IP54	IP54
Relative Humidity	0 ~ 100%	0 ~ 100%
Operating Temperature	-25°C ~ +45°C	-25°C ~ +45°C
Cooling Type	Air Cooling	Air Cooling
Dimensions (W x H x D)	900 x 2380 x 930 mm	1300 x 2380 x 930 mm
Weight	950 kg	1640 kg
Operating Altitude	≤ 3000 m	≤ 3000 m
Communication	RS-485 / 4G / Ethernet	RS-485 / 4G / Ethernet
Installation	Tower - type	Tower - type

* One STS100D can be connected to a maximum of two KAC50DP.

** STS250D can connect a maximum of five KAC50DP, and the STS250D-B is designed to connect a maximum of two KAC125DH units (following the same schematic as the STS100D).

EMS01D

Second-level EMS Communication Box



Dual power source, 220 VAC and 24 VDC for higher reliability.



Up to 20 portals available for southbound communication interfaces.



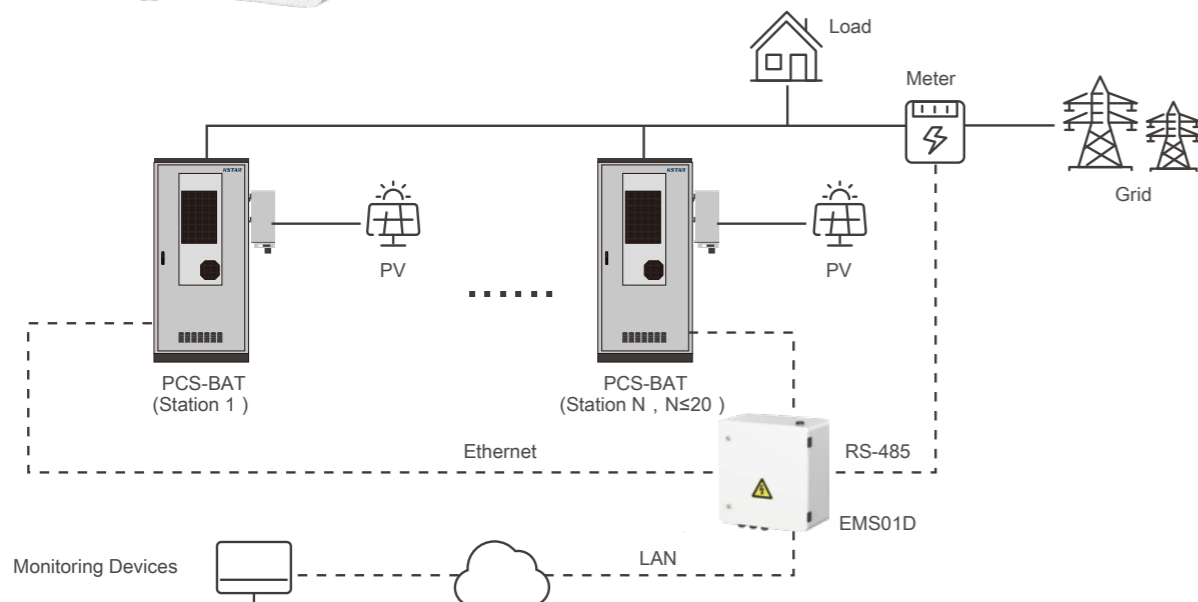
Support remote monitoring via Ethernet / WiFi / 4G, and local monitoring via web page.



Various accessible interfaces including DI / DO, USB, SD, RS-485.



IP65 outdoor design.



MODEL	EMS01D
Southbound Communication	
Southbound EMS Communication Method	Ethernet (Electrical)
Max. Number of Southbound EMS	20
Max. Distance of Southbound Communication	100 m
Ethernet Port Parameter	10 / 100 Mbps Adaptive
Northbound Communication	
Northbound Communication Method (Default)	Ethernet (Electrical / Optical Fiber)
Northbound Communication Method (Optional)	WLAN / 4G
Local Display	Embedded Web
Indicator Lights	Power, Running, Fault + Ethernet Status Indicators
Port Parameters	
Number of RS-485 Interfaces	7
USB Interface	1 with USB2.0
SD Interface	1
Digital Input Detection Interface	8
Digital Output Control Interface	4, NO + NC
Indicator Lights	Power, Running, Fault + Ethernet Status Indicators
Environmental Parameters	
Operating Temperature Range	-30°C ~ +55°C
Storage Temperature Range	-40°C ~ +70°C
Operating Relative Humidity	5% ~ 95% (No condensation)
Electrical Parameters	
Power Supply	DC / AC Redundant Power Supply
AC Power Supply Voltage Range	90 ~ 264 Vac
DC Power Supply Voltage Range	13 ~ 36 Vdc
Standby Power Consumption	< 40 W
Mechanical Parameters	
O&M Method	Front Panel Access
Dimensions (W x H x D)	560 x 600 x 300 mm
Weight	35 kg
IP Degree	IP65
Installation Method	Wall / Bracket / Floor Mounted
Certification & Standard	EN55032, EN IEC 61000-3-2, EN 61000-3-3, EN 55035, ETSI EN 301511, ETSI EN 301489, ETSI EN 300328, ETSI EN 300906, EN 62368-1, EN 50665, EN 62311

SPC01 Power Control Box

The SPC01 Power Control Box is designed to realize the function of power limitation or zero-export control in accordance with local grid codes and regulations. It is being used with KSTAR three-phase PV grid-tied inverters (3-125 kW) via RS-485 interface. The built-in smart meter collects the power of the grid-tied side of the PV power station in real time.



Powerful

Support number of inverters up to 80
Long distance of inverter communication up to 1000 m



Flexible Connectivity

Support multiple communication modes
Upload operating data to cloud server in real time



Easy to install

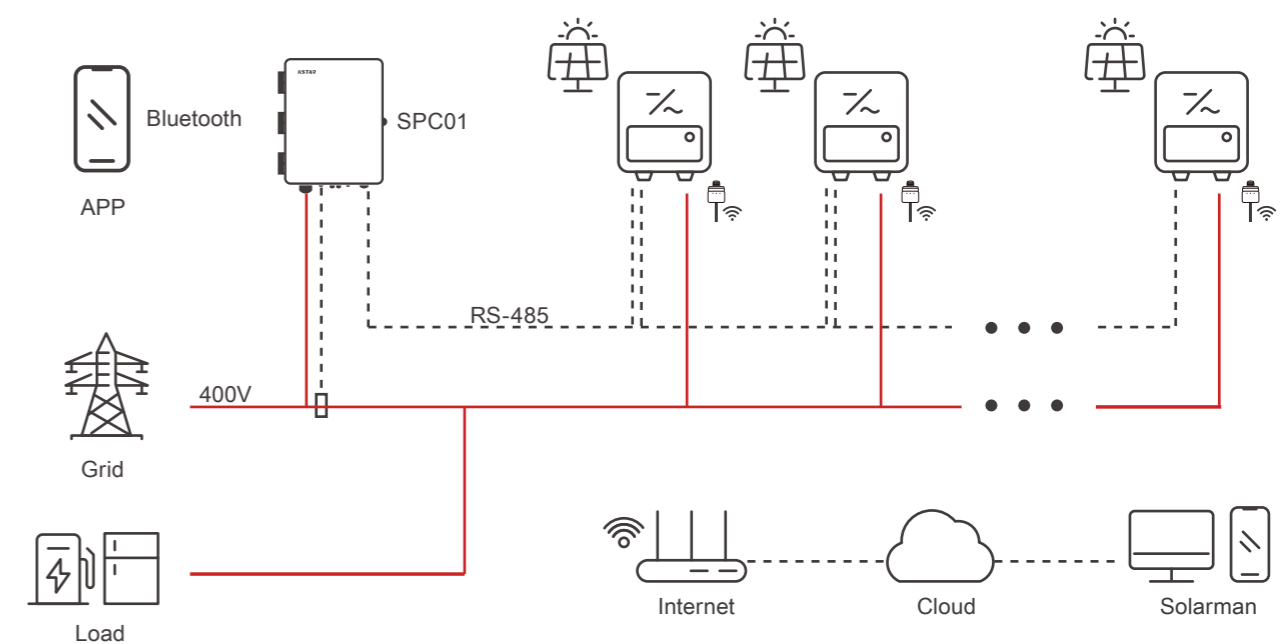
Wall / rack-mounted
IP65 for outdoor installation



Strong Adaptability

Zero-export response time < 2s
Support remote update

Technical Specifications	SPC01
Input	
Rated Input Voltage	230 Vac (L-N) / 400 Vac (L-L)
Input Voltage Range	173 ~ 480 Vac
Grid Connection Type	3W + N + PE
Rated Input Frequency	50 / 60 Hz
Input Frequency Range	45 ~ 65 Hz
Lightning Protection Grade	Grade C
Communication	
Inverter Communication Terminals	RS-485*5
Max. Number of Inverter	80 (Each terminal connects up to 16 inverters)
Max. Distance of Inverter Communication	1000 m
Communication	Ethernet / WiFi / 4G (Optional)
HMI	Bluetooth + Indicator Light
Function	
Communication Failure Shutdown	Yes
Remote Update	Yes
Zero Export	Yes
Zero-export Response Time	2s
Zero-export Control Accuracy	3%
Mechanical Parameter	
Dimensions (W x H x D)	420 x 320 x 132 mm
Weight	5.3 kg
Operation Temperature Range	-25 ~ +60°C
Cooling Type	Natural Convection
Max. Operation Altitude	3000 m
Operation Humidity	0 ~ 100% (No Condensation)
IP Class	IP65
Installation	Wall / Rack Mounted



Stick Logger

LSW-5 / LSE-4W / LS4G-4

The stick logger enables long-term, effective monitoring of the solar and energy system by collecting the inverter's operating and power generation data. The cloud platform offers strong data support, while the collected data is sent to the monitoring platform via different interfaces, such as WiFi, Ethernet, 4G and more. Real-time and historical system data is displayed in clear, intuitive charts, allowing users to monitor the system anytime, anywhere.



MODEL	LSW-5	LSE-4W	LS4G-4
Wireless Parameters			
Remote Way	WiFi	Ethernet / WiFi	4G
Number of connect inverters	1		
Data Transmission Interval	Default: 5 mins (1 ~ 15 mins Optional)		
External Interface	N / A	RJ45	Micro SIM card slot
Hardware Parameters			
Working Voltage	DC 5 V ~ DC 12 V		
Working Power	1.5 W	1.5 W	3.5 W
Indicator Light	One connected to inverter One connected to router One heartbeat indicator light		
Data Storage	Default: 8 MByte Flash	Default: 4 MByte Flash	Default: 8 MByte 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		
Software AT+Instruction set Parameters			
Serial Communication Rate	Default: 9600 bps (1200 ~ 115200 bps Optional)		
Configuration	AT+Instruction Set Localweb Configuration Remote Server Bluetooth		
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 systems. And Stick Logger (Ethernet / 4G) is optional.

* The 4G datalogger just can be used in Europe. Please contact KSTAR team for specific available countries.

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

YDS60-80

Smart Energy Meter

YDS60-80 is a DIN rail energy meter for three phase measuring.

With integrated RS-485 interface, it allows real-time reading of all relevant data, such as energy (total and partial), current, voltage, frequency, active and reactive power.



MODEL	YDS60-80
General	
Network System	3P3W / 3P4W
Nominal Voltage	3 × 230 / 400 Vac, 50 Hz / 60 Hz
Current Measurement Range	Direct Connected: from 0A to 80A, CT Connected: >80 A
Voltage Measurement Range	Direct Connected: from 90V to 500V, PT Connected: from 500 V to 1000 V
Power Consumption	≤ 1.5 W
Mounting	On 35mm DIN rail
Measurement Category	Category III
Pollution Degree	2
Measurement Accuracy	
Current (Direct Connected)	0.5% from 8 A to 80 A, ±0.4 A from 0.4 A to 8 A
Current (CT Connected)	0.5% from 0.5 A to 5 A, ±0.025 A from 0.025 A to 0.5 A
Phase Voltage	Class 0.5
Line Voltage	Class 0.5
Frequency	±0.02 Hz from 45 Hz to 65 Hz
Power	Class 1
Power Factor	±0.02 from -1 to 1
Active Energy	Class 1
Reactive Energy	Class 2
Environmental Conditions	
Operating Temperature	-25°C to 55°C
Storage Temperature	-40°C to 85°C
Humidity	5% to 95% RH (non-condensing)
Altitude	≤ 2000 m
Voltage Input (Ph-N)	
Operating Voltage	3 × 230 / 400 Vac, 50 Hz / 60 Hz
Power Dissipation Voltage Circuits	< 0.5 VA per phase
Measurement Range	AC 30 V to 265 V
Current Input	
Rated Current	3 x 1.5(6) A
Power Dissipation Current Circuits	< 0.2 VA per phase
Measurement Range	AC 0.05 A to 6 A
Communication	
Communication Protocol	Modbus
Communication Port	RS-485, half-duplex
Baud Rate	4800 bps / 9600 bps (default) / 19200 bps / 115200 bps
Stop Bit	1 (default) / 2
Check Bit	None (default) / Odd / Even

* YDS60-80 smart energy meter is being used along with BluePulse Series C&I ESS.

** It has not included Current Transformers. For system larger than 50 kW, CT connection is required. Please select the CT that meets the following requirements:

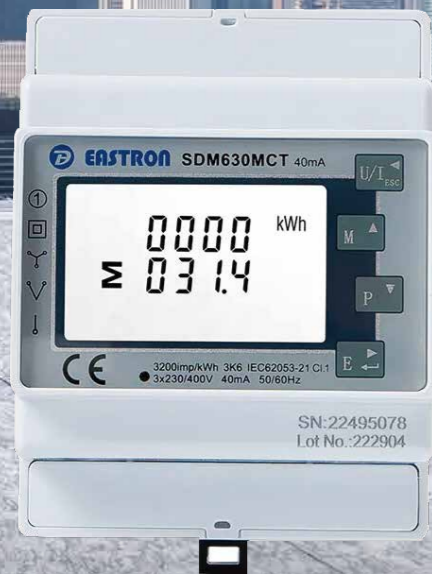
1. The selected CT's primary rating should be larger than the maximum current passing through the system's AC busbar.
2. Maximum Current = system capacity / 230 / 3

*** Please consult Kstar for more details.

SDM630MCT 40mA / V2 Smart Meter

DIN Rail Energy Meter for Single and Three Phase Electrical Systems

- ▶ Measures kWh kVA_{rh}, kW, kVA_r, kVA, P, F, PF, Hz, dmd, V, A, THD, etc.
- ▶ Bi-directional measurement IMP & EXP
- ▶ Two pulse outputs
- ▶ RS-485 Modbus
- ▶ Din rail mounting 35 mm
- ▶ 1 A / 5 A CT connection
- ▶ Better than Class 1 / B accuracy



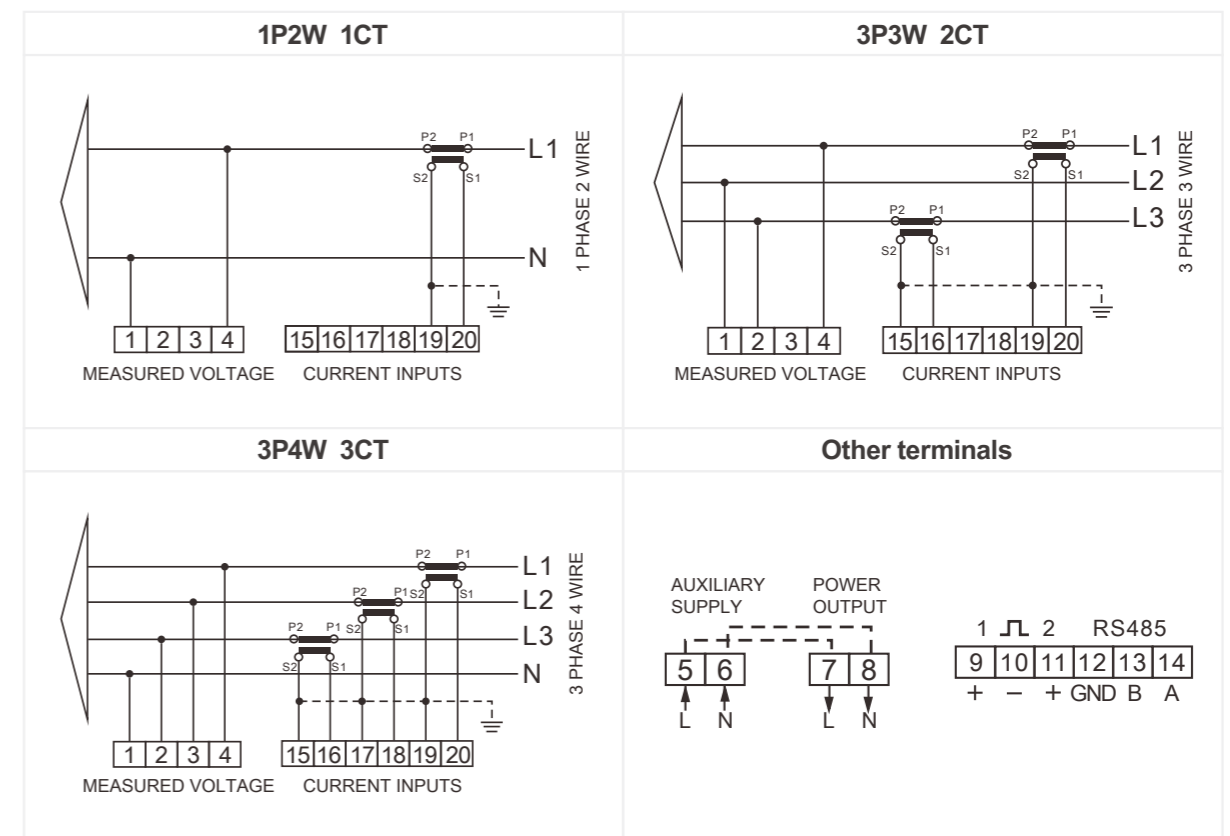
MODEL	SDM630MCT 40mA	SDM630MCT V2
Type of Measurement	RMS including harmonics on three phase AC system (3P,3P+N)	
Power	0.5% of range maximum	1% of range maximum
Active Energy	IEC 62053-22 Class 0.5S; IEC 62053-21 Class 1.0	
Reactive Energy	IEC 62053-23 Class 2	
Frequency	0.2% of mid-frequency	
Current	0.5% of range maximum	
Voltage	0.5% of range maximum	
Power Factor	1% of unity (0.01)	
Input		
CT Secondary	40 mA	1 A / 5 A
CT Primary	120 A	1 ~ 9999 A
Rated Voltage (U _n)	380 / 400 Vac	
Operational Voltage	173 to 480 Vac (L-L)	
Communications		
Communication Protocol	Modbus RTU	
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	

* SDM630MCT V2 smart meter is recommended to be used along with C&I string inverters.

** SDM630MCT has not included Current Transformers. Users should choose the 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^{1.2}.

*** Please consult KSTAR for more details.



GreenFlow AC Charger (Coming Soon)

Single Phase (7kW) / Three Phase (11 / 22 kW) / Wall-mounted

User-friendly Experience

- ▶ Start/end Charging via an RFID Card or Smart Mobile App
- ▶ OTA Updates

Secure and Robust

- ▶ Suitable for Outdoor Environment
- ▶ Embedded RCD

Smart Charging


- ▶ Scheduled Pre-set Charging
- ▶ Compatible with Most EVs





MODEL	CAS7	CAT11	CAT22
Input Wiring	1P+N+PE	3P+N+PE	3P+N+PE
Rated Power	7 kW	11 kW	22 kW
Rated Input Voltage	230 Vac ±15%	380 Vac ±15%	380 Vac ±15%
Rated Current	32 A	16 A	32 A
Dimensions (W x H x D)	216 x 268 x 105 mm		
Material	PC + ASA		
Frequency	50 ~ 60 Hz		
Color	White + Gray		
Cable Length	5 m		
Connector	Type 2		
Metering	On-Board Measurement		
LED	RGB LED		
RFID Card Reader	Mifare ISO / IEC14443 Type A		
Activation Method	Plug n' Play & RFID Card & App		
App Function	Remote start & stop, Scheduled Charging, Real-time Monitoring, Data Display, Power Adjusting		
Data Collector	Built-in Antenna		
Wi-Fi+Bluetooth	Standard		
RCD	6 mA DC + 30 mA Type A		
IP Rating	IP65		
IK Rating	IK10		
Certifications	CE (in progress) UKCA (planning)		
EMC	Class B		
IEC Standard	EN IEC 61851-1:2019 IEC61851-1:2017 IEC61851-21-2:2021		
Safety	Over-voltage protection, under-voltage protection, short circuit protection, grounding protection, over temperature protection, lightning protection		
Warranty	2 Years		
Temperature	-30°C ~ +50°C		
Operating Humidity	5% ~ 95%		
Operating Altitude	< 2000 m		

GreenFlow Coming Soon DC Charger

Three Phase / Floor Mounted / 240 kW / 480 kW

 Dual-connector Supports Simultaneous High-power Charging

 Dual Anti-rust Performance with Galvanized Steel and Specially Painted Coating in the Bottom Base

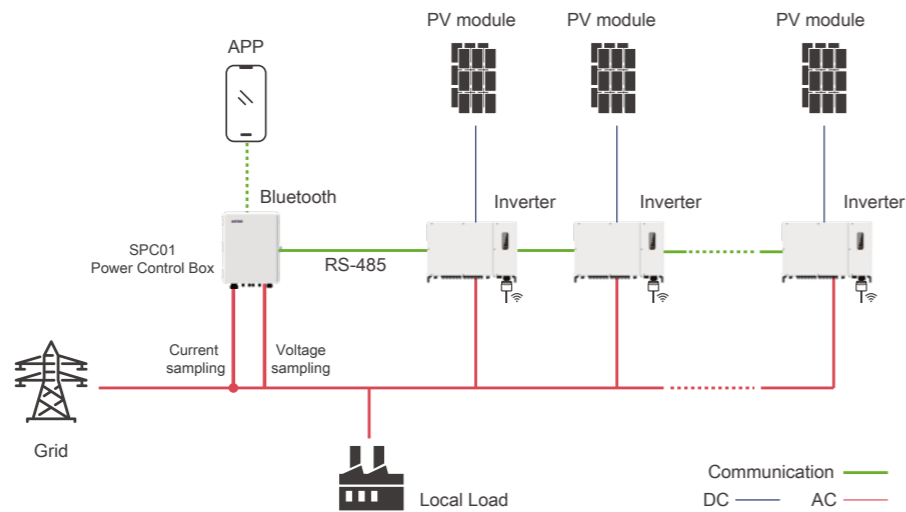
 IP65 Rating Supports Operations in Harsh Environments

 Multiple Protection in Real-time Operation

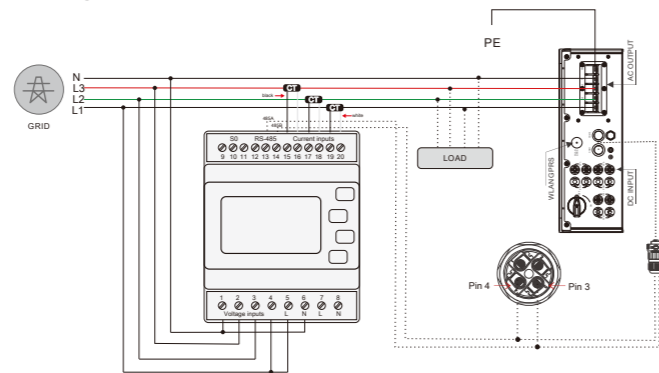


CATEGORY	CDA24D	CDA48D
General Info		
Dimensions (W x H x D)	850 × 2200 × 650 mm	850 × 2200 × 850 mm
Cable Length	5 M (7 M is optional)	
Input Performance		
Power Supply	L1+L2+L3+PE+N	
Rated Voltage	400 Vac ±10%	
Frequency	45 ~ 65 Hz	
Output Performance		
Output Voltage	150 ~ 1000 Vdc	
Output Current	Rated 380 A (boost 500 A)	Air cooling: Rated 380 A (boost 500 A) Liquid cooling: Rated 500 A (boost 650 A)
Rated Power	240 kW	480 kW
Charging Module	40 kW * 6 pcs	40 kW * 12 pcs
Connector Type	CCS2+CCS2	
HMI		
LED Indicator	RGB LED	
LCD Display	15.6" display with 4 buttons	
Emergency Stop	Yes	
Communication		
Payment Method	RFID Card / QR Code / POS Terminal	
PLC Communication	DIN70121 and ISO15118	
Ethernet	Yes	
4G	Optional	
OCCP	OCCP 1.6 J	
Electrical Parameters		
Efficiency	Max 96%	
Load and Charging Management	Smart and dynamic allocation of power modules and distribution of charging power to connector	
THD	≤ 5% (100% load)	
Power Factor	≥ 0.99 (50% ~ 100% load)	
Ripple Factor	≤ ±1%	
Noise Emission	≤ 65 dB	
EMC Compliance	Class A	
Safety		
Energy Meter	Class B (±1% accuracy) with MID certified	
Protection Rating	IP54	
Impact Resistance	IK10	
Electrical Protection	Over voltage protection, under voltage protection, overload protection, short circuit protection, open circuit protection, leakage protection, grounding protection, over temperature protection, lightning protection	
Working Environment		
Installation	Floor mounted on plinth or base	
Working Temperature	-30°C ~ +75°C (full power output below 55°C; power derates above 55°C; system will shutdown above 75°C)	
Storage Temperature	-40°C ~ +80°C	
Humidity	5% ~ 95%	
Altitude	≤ 2000 m	

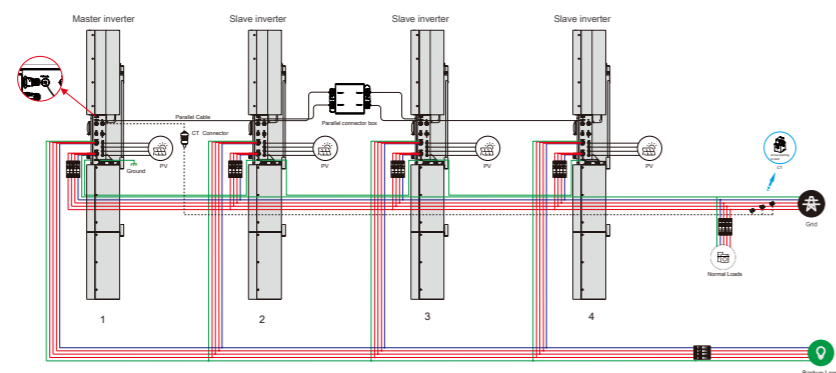
01 Zero Export Scheme for 1-125 kW String Inverter System



02 Zero Export Scheme for E10KT three-phase Hybrid Inverter System



03 Parallel System Scheme for E10KT three-phase Hybrid Inverter System



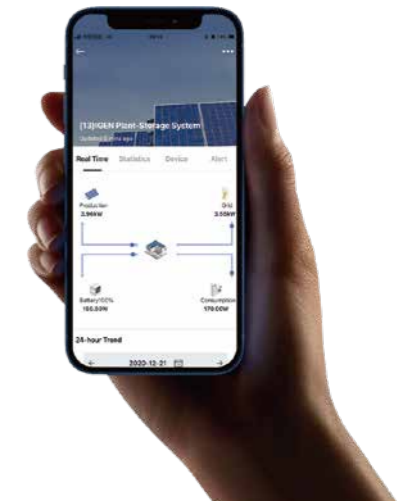
* For more information, refer to the User Manual.

Energy Management System Intelligent energy on your hands

SOLARMAN Smart home system with APP Remote access to the system

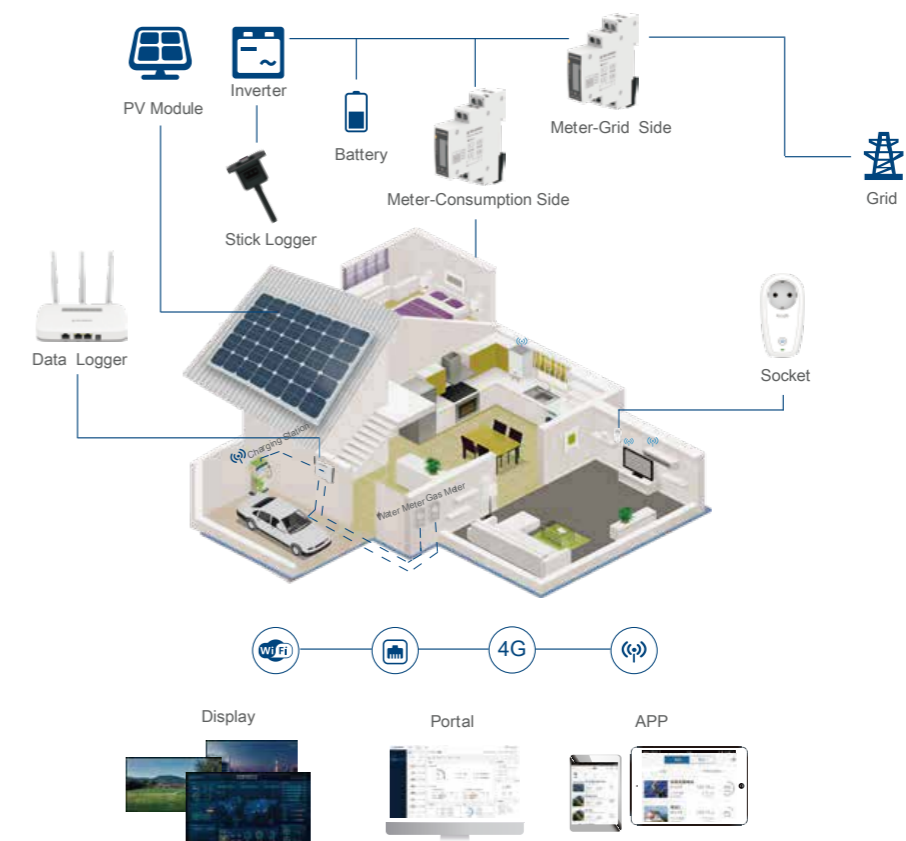
With the app you can monitor production and energy consumption of your home in real time. Set your preferences to optimize your energy independence, the protection against blackouts or energy savings.

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.



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.**

Global Presence, Local Excellence: Our Worldwide Network

With offices strategically positioned across the globe, we seamlessly connect our innovative solar solutions with communities everywhere. Experience the assurance of a truly global partner — from the manufacturing floor to your doorstep, our commitment to excellence transcends borders.



With cutting-edge technology and a dedicated workforce, we boast a robust production capacity that ensures timely delivery without compromising quality. From concept to creation, our commitment to innovation and streamlined processes empowers us to meet the growing demands for renewable energy solutions.



PV assembly workshop



IGBT/MOS welding



Aging Test



Large-machine fully automatic test system



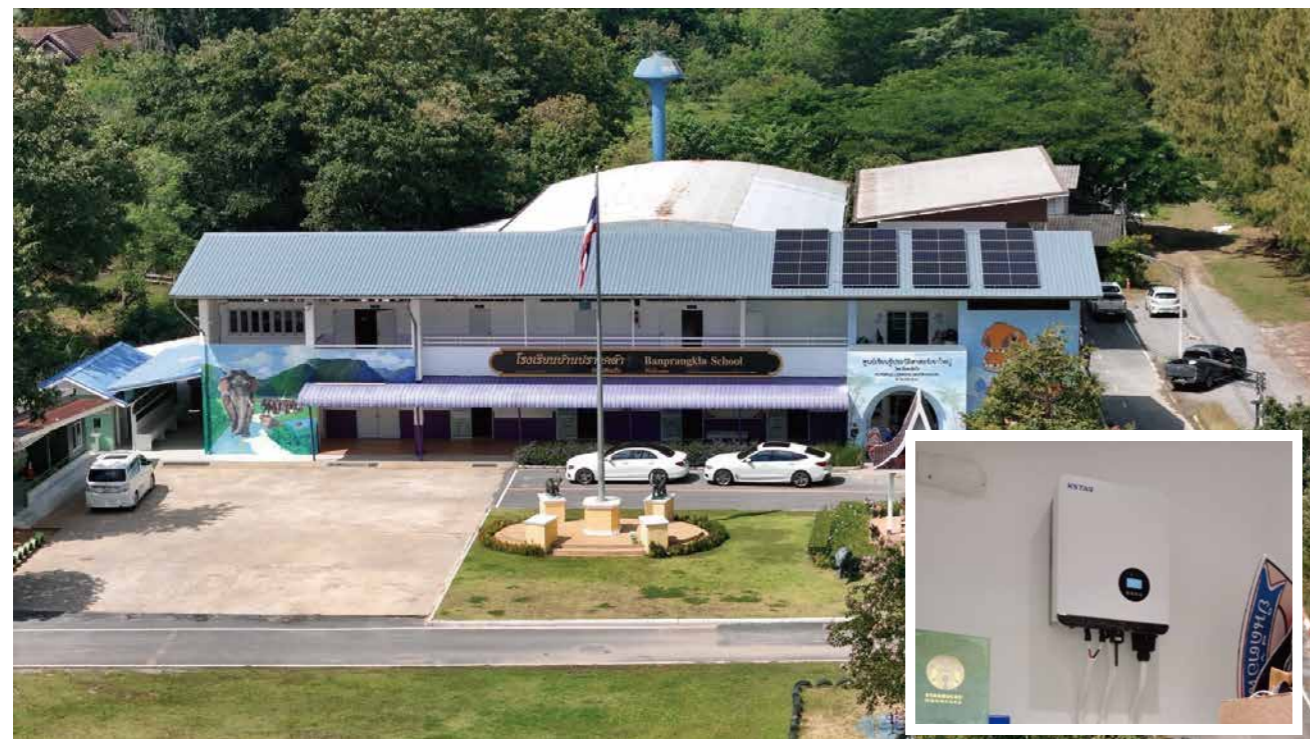
01 Pathum Thani, Thailand
Solar-Powered Home with Battery Storage



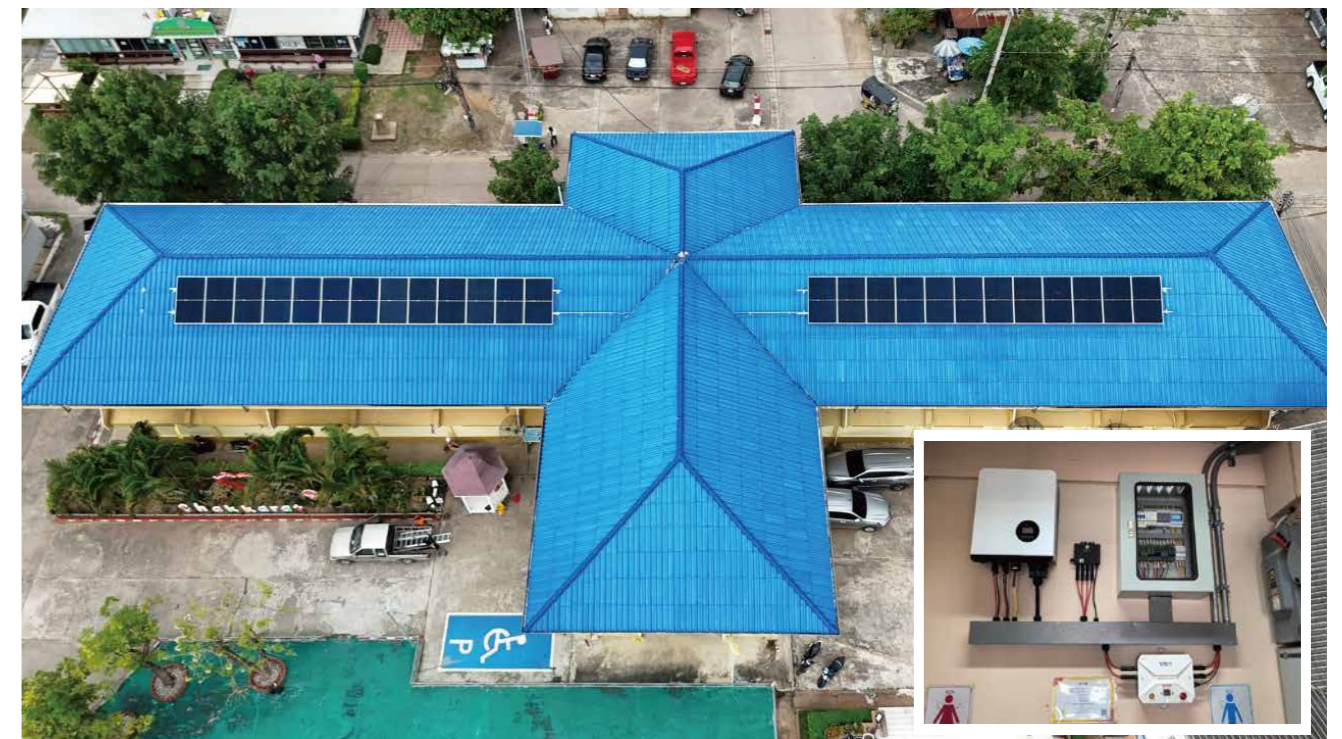
02 Bangkok, Thailand
Solar-Powered Home with Battery Storage



04 Bangkok, Thailand
Solar-Powered System with Battery Storage



03 Nakhon Ratchasima, Thailand
Solar-Powered School



05 Nakhon Ratchasima, Thailand
Solar-Powered Residential in Jakkarat District Office



06 Chon Buri, Thailand
Solar-Powered Factory in TOYOTA TSUSHO FORKLIFT

07 Bangkok, Thailand
Off-Grid Solar-Powered System with Battery Storage for Pedestrian Overpass and CCTV at Ha Yaek Lat Phraod



08 C&I Project in Busan, South Korea
3MW, KSG-110CL-KR



09 C&I Project in Gimhae, South Korea
5MW, KSG-110CL-C1-I25



10 C&I Project in Daejeon, South Korea
1MW, KSG-60K-A



11 EPS factory's Green Revolution Turkey, 900kW KSG-120CL-M0





12 Energy cost reduction for Mineral water factory
Turkey, 900kW KSG-120CL-M0





13 Utility Project in the Pakistan 900MW PV Plant



15 Utility Project in the Zhejiang 550MW Watersurface PV Plant



14 Utility Project in the Ukraine 200MW PV Plant



16 Utility Project in the Ukraine 15MW PV Plant

Thriving Three Decades: Your Industrial Partner and Green Home Expert



KSTAR THAI BRANCH

What we can do for you ?



Nationwide after-sales service network supported by a local Thai team



Tailor-made training



Local inventory support in Thailand



24/7 response and 48/7 onsite support for after-sale issue.

