

Serving inspiration with every generation



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Serving inspiration with every generation

K-Home



www.kstar.com www.kstarnewenergy.com

ABOUT KSTAR

• **1996**

Overseas Expansion

Enter the European and US Market

1993

KSTAR Established

Enter Offline UPS Field

• **2004**

Further Development

Enter High-power Online UPS Field

1998

New Manufacturing Base

Guanlan Industrial Park
Inaugurated in Shenzhen

• **2010**

IPO and Public Debut

Listed in Shenzhen Stock Exchange

2009

Enter New Energy Field

1st PV Inverter Produced

• **2015**

National Certified Technology Center

Certified by National Quality Management System

2013

Explore New Opportunities

Enter the Electric Vehicles Market

• **2023**

KSTAR Vietnam

Vietnam Plant in Operation

National-level Green Factory

2021

Further Invest in ESS Facilities

Open Jiangxi Changxin Gold Sunshine Power Supply Co.,Ltd

2019

CATL & KSTAR Partnership

Establish Joint Venture Factory with CATL

• **2025**

Jiangxi Gold Sunshine

Launches advanced punched grid plate production

2024

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



Unlock new business mode independently

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.

solutions for a diverse clientele in 180 countries and regions, with an impressive 68GW of KSTAR products already installed globally.

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

Backed by 30+ years of experience in electrical and electronic technology, KSTAR is committed to superior new energy



180+

Countries & Regions

68GW

PV Installation

30+

Years History

Thriving Three Decades: Your Industrial Partner and Green Home Expert



Home Series Residential ESS

Hybrid / All-in-one System / Single-phase input & output 3.6–6 kW



Safety

- 1. Aerogel Insulation:** Superior protection against heat and fire.
- 2. Consistent Quality:** Automated production ensures top-tier standards.



Reliability

- 1. Top Lithium Cells:** Powered by Great Power, the world's TOP lithium cell brands.
- 2. All-in-One Design:** Integrated system for smooth and coherent operation.



Friendly

- 1. Quick-Connect Terminals:** Easy and secure installation.
- 2. Remote Monitoring:** Control your system anytime via WiFi and app.



Battery Model	H-PACK-5.1D
Battery Module Specification	
Nominal Energy	5.12 kWh
Continuous Output Power (charge/discharge) for a Single Module	2560 W/4096 W
Voltage Range	44.8 V~57.6 V
Communication Interfaces	CAN & RS-485
Modules Per inverter	Up to 4 connected in parallel
Battery Type	LFP (LiFePO4)
Warranty	5 Year Product Warranty
Standard Compliance	
Cell	IEC/EN 62619, UN 38.3, UL 1973
Module	IEC/EN 62619, UN 38.3
Mechanical Specifications	
Dimensions(WxHxD)	480x485 x190 mm
Weight	43.9 kg
Mounting	Floor Stand
Operating Temperature (charge/discharge)	0~50°C(Charging), -10~50°C (Discharging)
Storage Temperature (12 months between recharges)	-10~50°C
Max. Operating Altitude	2000 m
Enclosure Protection	IP21
Cooling	Natural convection
Noise (at 1m distance)	<25 dBA

Hybrid Inverter Model	HH3.6KS	HH6KS	
PV String Input			
Max. PV Array Input Power	6.0 kWp	9.0 kWp	
Max. DC Voltage	500 V		
Nominal Voltage	270 V	300 V	
MPPT Voltage Range	120~450 V	120~450 V	
MPPT Voltage Range (Full Load)	270~425 V	300~425 V	
Start Voltage ¹⁾	120 V		
Number of MPPT	1		
Strings Per MPPT	1		
Max. Input Current Per MPPT	18 A	27 A	
Max. Short-Circuit Current Per MPPT	21 A	30 A	
AC Output (Grid)			
Nominal AC Output Power	3.6 kW	6.0 kW	
Max. AC Apparent Power	3.6 kVA	6.0 kVA	
Nominal AC Voltage	230 Vac		
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)		
Nominal Output Current	15.6 A	26.0 A	
Max. Output Current	21.0 A	35.0 A	
THDi	<5%		
Battery Input			
Battery Type	LFP (LiFePO4)		
Nominal Battery Voltage	51.2 V		
Charging Voltage Range	44~57.6 Vdc		
Max. Solar Charging Current	50 A(1*pack)	60 A(2*pack)	100 A(2*packs)
Max. AC Charging Current	50 A(1*pack)	60 A(2*pack)	100 A(2*packs)
Max. Overall Charging Current	50 A(1*pack)	60 A(2*pack)	100 A(2*packs)
Max. Discharging Current	50 A(1*pack)	78 A(2*pack)	100 A(2*packs)
Battery Capacity	5.12 kWh (Single Pack)		
AC Output (Backup)			
Dual Output	No		
Nominal AC Output Power(Battery Mode)	2.3 kW	3.6 kW	4.7 kW
Nominal AC Output Power(Battery + PV Mode)	3.6 kW		6.0 kW
Nominal Output Voltage	230 Vac		
Nominal Output Frequency	50 Hz/60 Hz		
Output THDv(@Linear Load)	<3%(Linear Load)		
Protection			
Anti-islanding Protection	Yes		
Output Over Current Protection	Yes		
DC Reverse Polarity Protection	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)	485 x410 x155 mm	480 x410 x155 mm	
Weight	14.2 kg	15.7 kg	
Operating Temperature Range	-10°C~50°C		
Cooling Type	Fan		
Max. Operation Altitude	3000 m(>2000m Derating)		
Operation Humidity	5%~95%		
IP Class	IP20		
Topology	Battery Isolation		
Communication	RS232/RS-485 /USB /CAN/DRY Contact		
Display	LD/APP		
Certification & Standard	IEC62109-1&2; EN/IEC 62920:2017+A1:2021; EN55011:2016+A2:2021; ISTA-2A; IEC 62116; IEC 61727; IEC60068		

1) Minimum voltage for inverter to start power output.

Home Series Residential ESS

Hybrid / All-in-one System / Single-phase input & output 10 kW



- 1. Aerogel Insulation:** Superior protection against heat and fire.
- 2. Consistent Quality:** Automated production ensures top-tier standards.



- 1. Top Lithium Cells:** Powered by CATL & EVE, the world's TOP 3 lithium cell brands.
- 2. All-in-One Design:** Integrated system for smooth and coherent operation.



- 1. Quick-Connect Terminals:** Easy and secure installation.
- 2. Remote Monitoring:** Control your system anytime via WiFi and app.



Battery Model	H-PACK-5.1A
Battery Module Specification	
Nominal Energy	5.12 kWh
Continucus Output Power (charge/discharae) for a Single Module	2560 W/2560 W
Voltage Range	44.8V~56.5 V
Communication Interfaces	CAN& RS-485
Modules Per Inverter	Up to 8 connected in parallel
Battery Type	LFP (LiFePO4)
Life Cycle	6000 cycles @25°C ±2°C or 0.5C Condition
Standard Compliance	
Cell	IEC/EN 62619,UN 38.3,UL 1973
Module	IEC/EN 62619, UN 38.3
Mechanical Specifications	
Dimensions(WxHxD)	416 x 204 x 580 mm
Weght	47 kg
Mounting	Rack Mount
Operating Temperature (charge/discharge)	0~50°C(Charging),-10~50°C (Discharging)
Storage Temperature (12 months between recharges)	-10~50°C
Max. Operating Altitude	2000 m
Enclosure Protection	IP21
Cooling	Natural convection
Noise (at 1m distance)	< 25 dBA

Hybrid Inverter Model	HH10KS
PV String Input	
Max. PV Array Input Power	18.0 kWp
Max. DC Voltage	500 V
Nominal Voltage	390 V
MPPT Voltage Range	60~450 V
MPPT Voltage Range (Full Load)	250~425 V
Start Voltage ¹⁾	120 V
Number of MPPT	2
Strings Per MPPT	1
Max. Input Current Per MPPT	27 A
Max. Short-Circuit Current Per MPPT	30 A
AC Output (Grid)	
Nominal AC Output Power	10.0 kW
Max. AC Apparent Power	10.0 kVA
Nominal AC Voltage	230 Vac
AC Grid Frequency Range	50 Hz/ 60 Hz (±5 Hz)
Nominal Output Current	43.5 A
Max. Output Current	58.8 A
THDi	< 5%
Battery Input	
Battery Type	LFP (LiFePO4)
Nominal Battery Voltage	51.2 V
Charging Voltage Range	44-57.6 Vdc
Max. Solar Charging Current	200 A (4*packs)
Max. AC Charging Current	160 A (4*packs)
Max. Overall Charging Current	200 A(4*packs)
Max. Discharging Current	200 A (4*packs)
Battery Capacity	5.12 kWh (Single Pack)
AC Output (Backup)	
Dual Output	Yes
Nominal AC Output Power(Battery Mode)	9.5 kW
Nominal AC Output Power(Battery + PV Mode)	10.0 kW
Nominal Output Voltage	230 Vac
Nominal Output Frequency	50 Hz/60 Hz
Output THDv(@Linear Load)	<3%(Linear Load)
Protection	
Anti-islanding Protection	Yes
Output Over Current Protection	Yes
DC Reverse Polarity Protection	Yes
DC/AC Surge Protection	DC Type II; Ac Type II
Insulation Detection	Yes
AC Short Circuit Protection	Yes
General Specifications	
Dimensions(W x H x D)	435 x580x 155 mm
Weight	24.5 kg
Operating Temperature Range	-10°C~50°C
Cooling Type	Fan
Max. Operation Altitude	3000 m(>2000m Derating)
Operation Humidity	5% ~95%
IP Class	IP20
Topology	Battery Isolation
Communication	RS232/RS485/USB/CAN/DRY Contact
Display	LCD/APP
Certification & Standard	IEC62109-1&2; EN/IEC 62920:2017+A1:2021; EN55011:2016+A2:2021; ISTA-2A; IEC 62116; IEC 61727; IEC60068

1) Minimum voltage for inverter to start power output.

Home Series H-PACK-5.1 Lithium battery pack

Rack Mount / Floor Stand



Safety

- 1. Quick-Connect Terminals:** Easy and Secure installation.
- 2. Precision Built:** Laser welding ensures durability and Safety.



Reliability

- 1. Top Lithium Cells:** Powered by EVE & Great Power, the world's TOP lithium cell brands.
- 2. Consistent Quality:** Automated production guarantees high standards.

Battery Model	H-PACK-5.1A	H-PACK-5.1D
Battery Module Specification		
Nominal Energy	5.12 kWh	
Continucus Output Power (charge / discharge) for a Single Module	2560 W / 2560 W	2560 W / 4096 W
Voltage Range	44.8V~56.5 V	44.8V~57.6 V
Communication Interfaces	CAN & RS-485	
Modules Per Inverter	Up to 8 connected in parallel	Up to 4 connected in parallel
Battery Type	LFP(LiFePO4)	
Warranty	5 Year Product Warranty	
Standard Compliance		
Cell	IEC/EN 62619.UN 38.3.UL 1973	
Module	IEC/EN 62619.UN 38.3	
Mechanical Specifications		
Dimensions (WxHxD)	416x204 x580 mm	480x485 x190 mm
Weght	47 kg	43 .9 kg
Mounting	Rack Mount	Floor Stand
Operating Temperature (charge / discharge)	0~50°C(Charging),-10~50°C (Discharging)	
Storage Temperature(12 months between recharges)	-10~50°C	
Max. Operating Altitude	2000 m	
Enclosure Protection	IP21	
Cooling	Natural convection	
Noise (at 1m distance)	<25 dBA	



Rack Mount



Floor Stand

Knight Series Battery PACK

16 kwh Pack Module



High-Efficiency Energy Storage

16 kWh LiFePO₄ battery, 93.5% round-trip efficiency, 90% depth of discharge



Powerful Performance

157 A continuous charge/discharge current, 8038 W high power output



Reliable & Durable

EVE cells + IP21 protection + 5-year warranty, full international certifications



Flexible Deployment

supports up to 10 parallel units, easy installation



Smart Temperature Control

Stable operation from 0°C to 50°C, real-time BMS monitoring



Battery Model		H-PACK-16
General Parameters		
Battery Type	LFP(LiFePO ₄)	
Cell Brand	EVE	
Energy Capacity	16 kWh	
Usable capacity	14.4 kWh- discharge capacity from 100% to min SoE	
Recommend Depth of Discharge	90%	
Norminal Voltage	51.2 V	
Operating Voltage Range	44.8~57.6 V	
Battery Pack Round-Trip Efficiency	93.5%	
Weight	128 kg	
Dimensions(WxHxD)	725 x624 x340 mm(including casters)	
IP Protection	IP21	
Warranty	5 Year Product Warranty	
Operation		
Max. Continuous Charging Current	157 A (Single Battery Pack)	
Max. Continuous Charging Power	8038 W	
Max. Continuous Discharging Current	157 A (Single Battery Pack)	
Max. Continuous Discharging Power	8038 W	
Operating Temperature Range	0°C to 50°C (Charging); -10°C to 50°C (Discharging)	
Cooling Type	Fan Cooling	
Humidity	0~95%(No condensation)	
BMS		
Communication	CAN; RS-485	
Monitoring Parameters	System Voltage, Current, Battery Voltage, Battery Temperature, PCBA Temperature Measurement	
Certificate		
Safety and Transportation	Pack: IEC/EN 62619; IEC 62040; IEC 62477; UN38.3 Cell: IEC/EN 62619; UN38.3; UL1973	

Knight Series NEW

Off-grid / 3.6 kW / 6 kW



Safety

- ▶ 6kV lightning protection
- ▶ DC - DC high frequency isolating converter (Battery)
- ▶ Waterproof PV terminal

Green

- ▶ Up to 93.5% efficiency
- ▶ Output power factor is 1.0
- ▶ Intelligent cooling fan control
- ▶ Low THDv

Reliable

- ▶ Widely input voltage of AC and PV
- ▶ Pure sine wave output
- ▶ Compatible with generator
- ▶ Built-in intelligent temperature sensors
- ▶ Dust cleaning alarms and dust-proof kit

Fast charging

- ▶ PV and AC charging current is up to 120 A
- ▶ Intelligent charging (Multiple charging modes)

User-friendly

- ▶ Dot-matrix screen and physical button
- ▶ Built-in WiFi module (Optional)
- ▶ APP support (Optional)
- ▶ Built-in PV terminal for easy installation

Applications

- ▶ Support home appliances / office equipment / lighting equipment etc.
- ▶ Support lead-acid and lithium-ion battery
- ▶ Max. 6 units in parallel
- ▶ RS-232 / USB / Dry contact

Model	Knight 3600-24	Knight 3600-48	Knight 6000-48
Input (AC)			
Nominal Voltage	230 V		
Selectable Voltage Range	170~280 Vac (For personal computer) 90~280 Vac (For home appliances)		
Frequency	50 /60 Hz (Auto detection)		
Power Factor	0.98		
Generator Input	Support		
PV string Input (DC)			
Max PV Array Open Circuit Voltage Range	500 Vdc		
Start-up Voltage	120 Vdc		
Initial Feeding Voltage	150 Vdc		
MPPT Voltage Range	120 ~450 Vdc		
Number of MPPT Trackers	1		
Nominal PV Input Power	4000 W	4000 W	6700 W
AC Output			
Nominal Output Power	3600 W / 3600 VA	3600 W/3600 VA	6000 W / 6000 VA
Nominal Voltage (Batt. Mode)	220/230(Default)/240 Vac+5%,User settable		
Surge Power	7200 VA	7200 VA	12000 VA
Transfer Time	15 ms (For personal computer); 20 ms (For home appliances)		
Waveform	Pure sine wave		
Output THDv (@Linear Load)	< 3%		
Battery & Charge			
Nominal Voltage (LiFePO4)	25.6 Vdc	51.2 Vdc	51.2 Vdc
Nominal Voltage (Lead Acid)	24 Vdc	48 Vdc	48 Vdc
Max. AC Charge Current	120 A	60 A	120 A
Max. Solar Charge Current	120 A	60 A	120 A
Max. Charge Current (Solar + AC Charge Current)	120 A (User selectable)	60 A (User selectable)	120 A (User selectable)
Interface & Mechanical			
Display	LCD & LED		
Parallel Function	Optional, max. 6 units		
Communication Interface	RS-232/USB/Dry contact; Optional: RS-485/CAN/WiF		
Dimensions (W x H x D)	134.0 x427.5 x460.8 mm		
Net Weight	11.5 kg	11.6 kg	13.2 kg
Protection			
Output Over-current Protection	Yes		
Function Protection	Short circuit; Over voltage; Under voltage;		
Insulation Detection	Yes		
DC /AC Surge Protection	Yes		
General Specifications			
Operating Temperature	-10°C~50°C		
Storage Temperature	-15°C~60°C		
Relative Humidity	5%~95%,non-condensing		
Max. Operating Altitude	3000 m(> 2000 m Derating)		
Protection Class	IP21		
Standards			
Certificate & Standard	IEC62109-1&2; EN/IEC62920:2017+A1:2021; EN55011:2016+A2:2021; STA-2A; IEC61683; IEC60068		

1)Specifications are subject to change without prior notice

Knight Series NEW

Hybrid / 3.6 kW / 6 kW



Safety

- ▶ 6kV lightning protection
- ▶ DC - DC high frequency isolating Converter (Battery)
- ▶ Waterproof PV terminal

Green

- ▶ Up to 93.5% efficiency
- ▶ Output power factor is 1.0
- ▶ Intelligent cooling fan control
- ▶ Low THDv

Reliable

- ▶ Widely input voltage of AC and PV
- ▶ Pure sine wave output
- ▶ Compatible with generator
- ▶ Built-in Intelligent temperature sensors
- ▶ Dust cleaning alarms and dust-proof kit

Fast charging

- ▶ PV and AC charging current is up to 120 A
- ▶ Intelligent charging (Multiple charging modes)

User-friendly

- ▶ Dot-matrix screen and physical button
- ▶ Built-in WiFi module (Optional)
- ▶ APP support (Optional)
- ▶ Built-in PV terminal for easy installation

Applications

- ▶ Support home appliances / office equipment / lighting equipment etc.
- ▶ Support lead-acid and lithium-ion battery
- ▶ Max. 6 units in parallel
- ▶ RS-232 / USB / Dry Contact

Model	KnightH 3600-24	KnightH 3600-48	KnightH 6000-48
Input (AC)			
Nominal Voltage	230 Vac		
Selectable Voltage Range	170~280 Vac (For Personal Computers) 90~280 Vac (For Home Appliances)		
Frequency	50 Hz/60 Hz(Auto Detection)		
Power Factor	>0.9		
Generator Input	Support		
PV string Input (DC)			
Max PV Array Open Circuit Voltage Range	500 Vdc		
Nominal Voltage	240 Vdc	240 Vdc	360 Vdc
Start-up Voltage	120 Vdc		
Initial Feeding Voltage	150 Vdc		
MPPT Voltage Range	120 Vdc~450 Vdc		
Number of MPPT Trackers	1		
Maximum input Current	18 A	18 A	27 A
Nominal PV input Power	4000 W	4000 W	6700 W
AC Output			
Nominal Output Power	3600 W	3600 W	6000 W
Nominal AC Voltage	230 Vac (Default),150~280 Vac user settable		
Output Voltage Range	184~264.5 Vac or 195.5~253 Vac (Selectable)		
AC Grid Frequency Range	50 Hz/60 Hz (±5 Hz)		
Max. Output Current	15.7 A	15.7 A	26.1 A
Power Factor	0.8leading-0.8lagging		
Battery Mode To Grid Efficiency (Peak)	93.5%		
AC Output (Backup)			
Nominal Output Power	3600 W / 3600 VA	3600 W/3600 V	6000 W / 6000 VA
Nominal Voltage (Batt. Mode)	230 Vac ± 5%		
Nominal Frequency(Hz)	50(Default)/60,User Settable		
Transfer Time	10ms typical,15ms max (For Personal Computers) / 20ms typical, 25ms max (For Home Appliances)		
Waveform	Pure sinewave		
Battery & Charge			
Nominal Voltage (LiFePO4)	25.6 Vdc	51.2 Vdc	51.2 Vdc
Nominal Voltage (Lead Acid)	24 Vdc	48 Vdc	48 Vdc
Max. AC Charge Current	120 A	60 A	120 A
Max. Solar Charge Current	120 A	60 A	120 A
Max. Charge Current (Solar + AC Charge Current)	120 A(User selectable)	60 A(User selectable)	120 A(User selectable)
Interface & Mechanical			
Display	LCD & LED		
Parallel Function	6 units		
Communication Interface	RS-232 / USB / Dry Contact / Optional: RS-485 / CAN / WIFI		
Dimensions (W x H x D)	134.0 x 427.5 x 460.8 mm		
Net Weight	11.7 kg	11.8 kg	13.4 kg
Protection			
Anti-islanding Protection	Yes		
Output Over-current Protection	Yes		
Ground Fault Circuit Interrupter	Yes		
Insulation Detection	Yes		
AC /DC Surge Protection	DC Type II; Ac Type III		
General Specifications			
Operating Temperature	-10°C~50°C		
Storage Temperature	-15°C~60°C		
Relative Humidity	5%~95%,non-condensing		
Max. Operating Altitude	3000 m(>2000 m Derating)		
Protection Degree	IP21		
RoHS	Yes		
Certificate & Standard	IEC62109-1&2; EN/IEC62920:2017+A1:2021; EN55011:2016+A2:2021; STA-2A; IEC62116; IEC61727; IEC61683; IEC60068		

1)Specifications are subject to change without prior notice

BlueSpark Series Residential ESS NEW

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

Save Your Energy Bill

- ▶ Powered by Tire 1 battery cell
- ▶ Human safe low-voltage solution
- ▶ Optional AFCI

Smart Home Energy

- ▶ Supports Self Consumption, Peak Shaving, Time-of-use, and Battery Priority operation modes
- ▶ SG Ready Heat Pump compatible

High Performance

- ▶ DC / AC ratio up to 2
- ▶ Long battery cycle life

Easy Installation

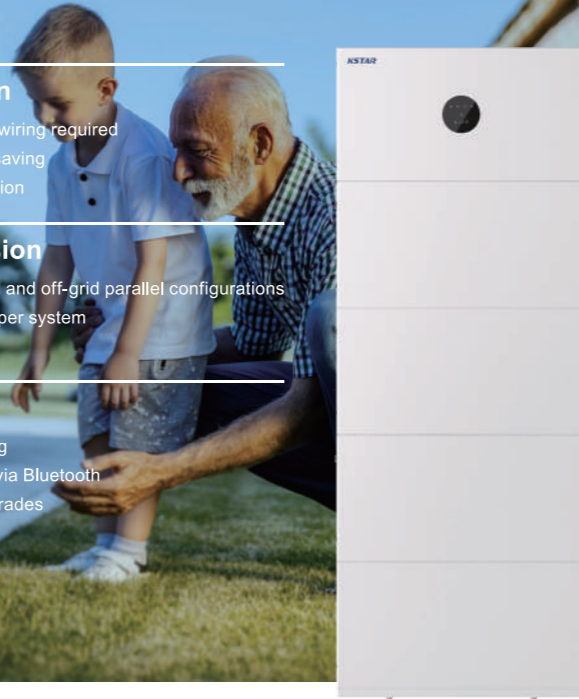
- ▶ Stackable design, no wiring required
- ▶ Compact and space-saving
- ▶ IP66 rating for protection

Flexible Expansion

- ▶ Supports both on-grid and off-grid parallel configurations
- ▶ Max. 4 battery packs per system

Smart O&M

- ▶ 24 / 7 cloud monitoring
- ▶ Easy commissioning via Bluetooth
- ▶ Remote firmware upgrades



Battery Model		BP48100PF1A-G2	
General Parameters			
Battery Type	LFP (LiFePO4)	Operation	
Cell Brand	EVE	Max. Continuous Charging Current	80 A (single battery pack)
Energy Capacity	5.12 kWh ¹⁾	Max. Continuous Charging Power	4096 W
Usable Capacity	4.6 kWh ²⁾	Max. Continuous Discharging Current	80 A (single battery pack)
Max.Depth of Discharge	95%	Max. Continuous Discharging Power	4096 W
Normal Voltage	51.2 V	Operating Temperature Range	-10 to 50°C (Charging); -10 to 50°C (Discharging) ³⁾
Operating Voltage Range	44.8 ~ 57.6 V	Cooling Type	Natural Cooling
Battery Pack Round-Trip Efficiency	> 94%	Humidity	0 ~ 95% (no condensation)
Weight	56 kg	BMS	
Dimensions (W x H x D)	725 x 370 x 190 mm	Modules Connection	Max. 4
IP Protection	IP65	Capacity	100 / 200 / 300 / 400 Ah
Warranty	5 Year Product Warranty, 10 Year Performance	Communication	CAN
Certificate		Monitoring Parameters	System voltage,current,battery voltage, Battery temperature,PCBA temperature measurement
Safety and Transportation	Pack: IEC/EN 62619; UN38.3; Cell:IEC/EN 62619; UN38.3; UL1973		

1) Total Energy Capacity is tested under the following conditions: @25°C, 0.5C charging / 0.5C discharging, at the beginning of life.
 2) Usable Energy Capacity refers to the energy discharged from 100% to the minimum state of energy (SoE).
 3) The operating temperature parameters only apply to battery pack models with heating function. For battery pack models without heating function, the operating temperature range will be: 0 to 50°C(Charging), -10 to 50°C (Discharging).
 4) Minimum voltage for inverter to start power output.
 5) Nominal Output current and Maximum output current is 25 A for Ireland
 6) Max. AC continuous output power is 4999 W for Australia and 4600 W for Germany and South Africa.
 7) Max. AC apparent output power is 4999 VA for Australia and 4600 VA for Germany and South Africa
 8) Max. output current is 21.7 A for Australia and 20 A for Germany and South Africa.

Hybrid Inverter Model	E3.68KS-D22	E5KS-D22	E6KS-D22
PV Input			
Recommended Max.PV Array	7.2 kW	10 kW	10 kW
Input Power @STC			
Max PV Voltage	500 V		
Nominal Voltage	360 V		
MPPT Voltage Range	120 ~ 480 V		
MPPT Voltage Range with Full Load	200 ~ 425 V	250 ~ 425 V	250 ~ 425 V
Start Voltage ⁴⁾	120 V		
Number of MPPT Tracker	2		
String per MPPT Tracker	1		
Max. Input Current per MPPT	20 A		
Max. Short-Circuit Current per MPPT	25 A		
AC Output & Input (Grid)			
Max. AC Continuous Output Power	3680 W	5000 W ⁶⁾	6000 W
Max. AC Apparent Output Power	3680 VA	5000 VA ⁷⁾	6000 VA
Max. Continuous Input Power	7360 W	9200 W	9200 W
Nominal AC Voltage	230 Vac		
Normal Frequency	50 Hz / 60 Hz (±5 Hz)		
Normal Output Current	16 A	21.7 A	26.1 A ⁵⁾
Max. Output Current	16.7 A	22.7 A ⁸⁾	27.3 A ⁵⁾
Max. Input Current	32 A	40 A	40 A
Power Factor (cosΦ)	-0.8 (Lagging) ~ 0.8 (Leading)		
THDi	< 3%		
AC Output (Backup)			
Normal AC Output Power	3680 W	5000 W	6000 W
Max. AC Output Power	3680 VA	5000 VA	6000 VA
Max. Output Current	16 A	21.7 A	26.1 A
Normal Output Voltage	230 Vac		
Nominal Output Frequency	50 Hz / 60 Hz		
Output THDv (@Linear Load)	< 3% (Linear Load)		
Battery Input			
Battery Type	LFP (LiFePO4)		
Nominal Battery Voltage	48 V		
Charging Voltage Range	42 ~ 58 V		
Max. Charging / Discharging Current	80 A / 80 A	120 A / 120 A	125 A / 125 A
Rated Charging / Discharging Power	3600 W / 3900 W	5000 W / 5400 W	6000 W / 6400 W
Battery Capacity	100 ~ 400 Ah		
Efficiency			
Max. PV Efficiency	97.2%		
Euro. Efficiency	95.9%	96.4%	96.5%
Protection			
DC Switch	Integrated		
Anti-islanding Protection	Integrated		
Residual Current Monitoring	Integrated		
AC Short Circuit Protection	Integrated		
AC Overvoltage Protection	Integrated		
DC / AC Surge Protection	DC Type II; AC Type III		
Remote Shutdown	Integrated		
AFCI	Optional		
General Specification			
Dimensions (W x H x D)	725 × 390 × 245 mm		
Weight	24.8 kg	25.5 kg	25.5 kg
Operating Temperature Range	-25°C to + 60°C (> 45°C derating)		
Cooling Type	Natural Convection		
Max. Operation Altitude	≤ 4000 m		
Operation Humidity	0 ~ 95% (no condensation)		
IP Class	IP66		
Topology	High Frequency Isolation		
Communication	RS-485 / WIFI / (4G / Ethernet optional)		
Display	LED+Bluetooth / APP / WEB		
Certification & Standard	IEC/EN62109-1&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 61727; IEC 62116; IEC 60068; IEC 61683; EN 50549-1; EN 50549-10; VDE-AR-N 4105; G98/G99; NC RfG:2018; C10/C11; CEI-021		

BlueSpark Series Residential ESS NEW

Single Phase / All-in-one Hybrid System / 6-12 kW

Save Your Energy Bill

- ▶ Powered by Tier 1 Battery Cells
- ▶ Human-safe Low-voltage System
- ▶ Optional AFCI Protection

Easy Installation

- ▶ Stackable Design, No Extra Wiring Required
- ▶ Compact and Space-saving
- ▶ IP66 Protection Rating

Smart Home Energy

- ▶ Supports Self Consumption, Peak Shaving, Time-of-Use, and Battery Priority Modes
- ▶ SG Ready Heat Pump Compatible

Flexible Expansion

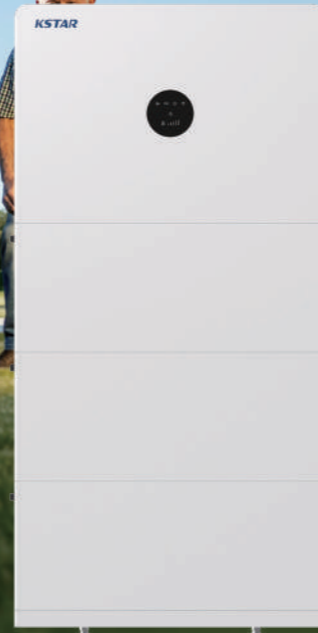
- ▶ Supports On-grid & Off-grid Parallel Operation

High Performance

- ▶ DC / AC Ratio Up to 2
- ▶ Long Battery Cycle Life

Smart O&M

- ▶ 24 / 7 Cloud Monitoring Via KSTAR SYNC
- ▶ Easy Commissioning Via Bluetooth or Wi-Fi
- ▶ Remote Firmware Upgrades



Battery Model	BP48314P(F)1A ¹⁾
General Parameters	
Battery Type	LiFe (LiFePO4)
Cell Brand	EVE
Energy Capacity	16 kWh
Usable Capacity	15.68 kWh-discharge capacity from 100% to min SoE
Max.Depth of Discharge	98%
Normal Voltage	51.2 V
Operating Voltage Range	44.8 ~ 57.6 V
Weight	130 kg
Dimensions (W x H x D)	725 x 300 x 600 mm
IP Protection	IP65
Warranty	5 Year Product Warranty, 10 Year Performance Warranty
Compatible Inverter	E6/8/10/12KS-D42 & E15/17/20/22/25KT-D42 & E3.68/5/6 KS-D22 & E4/5/6/8/10/12KT-D22
Operation	
Max. Continuous Charging Current	157 A (Single Battery Pack)
Max. Continuous Charging Power	8034 W
Max. Continuous Discharging Current	157 A (Single Battery Pack)
Max. Continuous Discharging Power	8034 W
Operating Temperature Range	-10°C to 50°C (Charging with heating film); -10°C to 50°C (Discharging)
Cooling Type	Fan Cooling
Humidity	0 ~ 95% (No condensation)
BMS	
Communication	CAN
Monitoring Parameters	System Voltage, Current, Cell Voltage, Cell Temperature, PCBA Temperature
Certificate	
Safety and Transportation	Pack: UN38.3; MSDS; IEC 62040; IEC 62477; IEC 62619; IEC 63056; IEC 61000-6-2/4; Cell: IEC/EN 62619; UN38.3;

¹⁾ Refer to two models of battery pack: BP48314P1 (without heating foil) and BP48314PF1 (with heating foil).

Hybrid Inverter Model	E6KS-D42	E8KS-D42	E10KS-D42AU	E10KS-D42	E12KS-D42
PV Input					
Recommended Max.PV Array	12000 W	16000 W	20000 W	20000 W	24000 W
Input Power @STC*2					
Max PV Voltage	600 V				
Nominal Voltage	380 V				
MPPT Voltage Range	100 ~ 550 V				
MPPT Voltage Range With Full Load	100 ~ 480 V	120 ~ 480 V	150 ~ 480 V	150 ~ 480 V	180 ~ 480 V
Start Voltage	120 V				
Number of MPPT Tracker	4				
String per MPPT Tracker	1				
Max. Input Current per MPPT	20				
Max.Short-circuit Current per MPPT	30				
AC Output & Input (Grid)					
Max. AC Continuous Output Power	6000 W	8000 W	9999 W	10000 W	12000 W
Max. AC Apparent Output Power	6600 VA	8800 VA	9999 VA	11000 VA	12000 VA
Max. Continuous Input Power	12000 W	16000 W	20000 W	20000 W	24000 W
Nominal AC Voltage	1P+N+PE, 220 / 230 / 240 Vac				
Normal Frequency	50 Hz / 60 Hz (±5 Hz)				
Max. Output Current	26.1 A @ 230 Vac	34.8 A @ 230 Vac	43.4 A @ 230 Vac	43.5 A @ 230 Vac	52.2 A @ 230 Vac
Max. Input Current	54.5 A	72.8 A*	63 A	90 A*	100 A*
Power Factor (cosΦ)	0.8 leading ~ 0.8 lagging				
THDi	< 3%				
AC Output (Backup)					
Normal AC Output Power	6000 W	8000 W	9999 W	10000 W	12000 W
Max. AC Output Power	6600 VA	8800 VA	9999 VA	11000 VA	12000 VA
Max. Output Current	26.1 A @ 230 Vac	34.8 A @ 230 Vac	43.4 A @ 230 Vac	43.5 A @ 230 Vac	52.2 A @ 230 Vac
Normal Output Voltage	1P+N+PE, 220 / 230 / 240 Vac				
Normal Output Frequency	50 Hz / 60 Hz				
Output THDv(@Linear Load)	< 3% (Linear Load)				
Battery Input					
Battery Type	LFP(LiFePO4)				
Normal Voltage	51.2 V				
Charging Voltage Range	42 ~ 58 V				
Max. Charging / Discharging Current	200 A / 120 A	200 A / 160 A	200 A / 200 A	200 A / 200 A	200 A / 240 A
Max. Charging / Discharging Power	10000 W / 6000 W	10000 W / 8000 W	10000 W / 9999 W	10000 W / 10000 W	10000 W / 12000 W
Battery Capacity	314 ~ 942 Ah				
Efficiency					
Max.PV Efficiency	97.6%				
Euro. Efficiency	96.5%				
Protection					
DC Switch	Integrated				
Anti-islanding Protection	Integrated				
Residual Current Monitoring	Integrated				
PV Reverse Polarity Protection	Integrated				
AC Short Circuit Protection	Integrated				
AC Overvoltage Protection	Integrated				
AC / DC Surge Protection	DC Type III(DC typ II Optional); AC Type III				
Remote Shutdown	Integrated				
AFCI	Optional				
General Specifications					
Dimensions (W×H×D)	725 x 510 x 245 mm				
Weight	43 kg				
Operating Temperature Range	-25°C to +60°C (> 45°C derating)				
Cooling Type	Fan Cooling				
Max. Operating Altitude	≤ 4000m				
Operating Humidity	0 ~ 95% (No Condensation)				
IP Class	IP66				
Topology	Transformerless				
Communication	RS-485 / CAN / WIFI				
Display	LED / WIFI+APP / Web				
Certification&Standard	IEC/EN 62109-1&2; EN61000-6-1; EN61000-6-2; EN61000-6-3; EN61000-6-4; EN61000-3-11; EN61000-3-12; IEC 61727; IEC 62116; IEC 60068; IEC 61683; AS 4777.2;				

* Max. AC input current is 63A for Australia.

BlueSpark Series Residential ESS NEW

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

Save Your Energy Bill

- ▶ Powered by Tire 1 battery cell
- ▶ Human safe low-voltage solution
- ▶ Optional AFCI

Smart Home Energy

- ▶ Supports Self Consumption, Peak Shaving, Time-of-use, and Battery Priority operation modes
- ▶ SG Ready Heat Pump compatible

High Performance

- ▶ DC / AC ratio up to 2
- ▶ Long battery cycle life
- ▶ 100% three-phase unbalanced output

Easy Installation

- ▶ Stackable design, no wiring required
- ▶ Compact and space-saving
- ▶ IP66 rating for protection

Flexible Expansion

- ▶ Supports both on-grid and off-grid parallel configurations
- ▶ Max. 8 battery packs per system

Smart O&M

- ▶ 24 / 7 cloud monitoring
- ▶ Easy commissioning via Bluetooth
- ▶ Remote firmware upgrades



Battery Model		BP48100PF1A-G2	
General Parameters			
Battery Type	LFP (LiFePO4)	Max. Continuous Charging Current	80 A (single battery pack)
Cell Brand	EVE	Max. Continuous Charging Power	4096 W
Energy Capacity	5.12 kWh ¹⁾	Max. Continuous Discharging Current	80 A (single battery pack)
Usable Capacity	4.6 kWh ²⁾	Max. Continuous Discharging Power	4096 W
Max. Depth of Discharge	95%	Operating Temperature Range	-10 to 50°C (Charging); -10 to 50°C (Discharging) ³⁾
Norminal Voltage	51.2 V	Cooling Type	Natural Cooling
Operating Voltage Range	44.8 ~ 57.6 V	Humidity	0 ~ 95% (no condensation)
Battery Pack Round-Trip Efficiency	> 94%	BMS	
Weight	56 kg	Modules Connection	Max. 8
Dimensions (W x H x D)	725 x 370 x 190 mm	Capacity	100 / 200 / 300 / 400 / 500 / 600 / 700 / 800 Ah
IP Protection	IP65	Communication	CAN
Warranty	5 Year Product Warranty, 10 Year Performance	Monitoring Parameters	System voltage, current, battery voltage, Battery temperature, PCBA temperature measurement
Certificate			
Safety and Transportation	Pack: IEC/EN 62619; UN38.3; Cell: IEC/EN 62619; UN38.3; UL1973		

1) Total Energy Capacity is tested under the following conditions: @25°C, 0.5C charging / 0.5C discharging, at the beginning of life.

2) Usable Energy Capacity refers to the energy discharged from 100% to the minimum state of energy (SoE).

3) The operating temperature parameters only apply to battery pack models with heating function. For battery pack models without heating function, the operating temperature range will be: 0 to 50°C(Charging), -10 to 50°C (Discharging).

Hybrid Inverter Model	E4KT-D22	E5KT-D22	E6KT-D22
PV Input			
Recommended Max. PV Array	10 kW	11 kW	12 kW
Input Power @STC			
Max PV Voltage	1000 V		
Nominal Voltage	720 V		
MPPT Voltage Range	140 ~ 950 V		
MPPT Voltage Range with Full Load	200 ~ 800 V	230 ~ 800 V	250 ~ 800 V
Start Voltage ¹⁾	200 V		
Number of MPPT Tracker	2		
String per MPPT Tracker	1		
Max. Input Current per MPPT	20 A		
Max. Short-Circuit Current per MPPT	25 A		
AC Output & Input (Grid)			
Max. AC Continuous Output Power	4000 W	5000 W	6000 W
Max. AC Apparent Output Power	4400 VA	5500 VA	6600 VA
Max. Continuous Input Power	10000 W	11000 W	12000 W
Nominal AC Voltage	400 Vac		
Norminal Frequency	50 Hz / 60 Hz (±5 Hz)		
Norminal Output Current	5.8 A	7.3 A	8.7 A
Max. Output Current	13.1 A	13.1 A	13.1 A
Max. Input Current	21.0 A	22.6 A	22.6 A
Power Factor (cosΦ)	-0.8 (Lagging) ~ 0.8 (Leading)		
THDi	< 3%		
AC Output (Backup)			
Norminal AC Output Power	4000 W	5000 W	6000 W
Max. AC Output Power	4000 VA	5000 VA	6000 VA
Norminal Output Current	5.8 A	7.3 A	8.7 A
Max. Output Current	13.1 A	13.1 A	13.1 A
Norminal Output Voltage	400 Vac		
Nominal Output Frequency	50 Hz / 60 Hz		
Output THDv (@Linear Load)	2% (Linear Load)		
Battery Input			
Battery Type	LFP (LiFePO4)		
Nominal Battery Voltage	51.2 V		
Charging Voltage Range	44 ~ 58 V		
Max. Charging / Discharging Current	100 A / 100 A	120 A / 120 A	120 A / 150 A
Rated Charging / Discharging Power	4000 W	5000 W	6000 W
Battery Capacity	100 ~ 800 Ah		
Efficiency			
Max. PV Efficiency	96.6 %		
Euro. Efficiency	94.5 %		
Protection			
DC Switch	Integrated		
Anti-Islanding-Protection	Integrated		
Residual Current Monitoring	Integrated		
PV Reverse Polarity Protection	Integrated		
AC Short Circuit Protection	Integrated		
AC Overvoltage Protection	Integrated		
DC / AC Surge Protection	DC Type II; AC Type III		
Remote Shutdown	Integrated		
AFCI	Optional		
General Specification			
Dimensions (W x H x D)	725 × 490 × 245 mm		
Weight	40 kg		
Operating Temperature Range	-25°C to + 60°C (> 40°C derating)		
Cooling Type	Natural Convection		
Max. Operation Altitude	≤ 3000 m		
Operation Humidity	0 ~ 95% (no condensation)		
IP Class	IP66		
Topology	High Frequency Isolation		
Communication	RS-485 / WIFI / (4G / Ethernet optional)		
Display	LED+Bluetooth / APP / WEB		
Certification & Standard	IEC/EN62109-1&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 61727; IEC 62116; IEC 60068; IEC 61683; EN 50549-1; EN 50549-10; VDE-AR-N 4105; NC RfG:2018; C10/C11		

1) Minimum voltage for inverter to start power output.

BlueSpark Series Residential ESS NEW

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

Save Your Energy Bill

- ▶ Powered by Tire 1 battery cell
- ▶ Human safe low-voltage solution
- ▶ Optional AFCI

Smart Home Energy

- ▶ Supports Self Consumption, Peak Shaving, Time-of-use, and Battery Priority operation modes
- ▶ SG Ready Heat Pump compatible

High Performance

- ▶ DC / AC ratio up to 2
- ▶ Long battery cycle life
- ▶ 100% three-phase unbalanced output

Easy Installation

- ▶ Stackable design, no wiring required
- ▶ Compact and space-saving
- ▶ IP66 rating for protection

Flexible Expansion

- ▶ Supports both on-grid and off-grid parallel configurations
- ▶ Max. 8 battery packs per system

Smart O&M

- ▶ 24 / 7 cloud monitoring
- ▶ Easy commissioning via Bluetooth
- ▶ Remote firmware upgrades



Battery Model		BP48100PF1A-G2	
General Parameters			
Battery Type	LFP (LiFePO4)	Max. Continuous Charging Current	80 A (single battery pack)
Cell Brand	EVE	Max. Continuous Charging Power	4096 W
Energy Capacity	5.12 kWh ¹⁾	Max. Continuous Discharging Current	80 A (single battery pack)
Usable Capacity	4.6 kWh ²⁾	Max. Continuous Discharging Power	4096 W
Max. Depth of Discharge	95%	Operating Temperature Range	-10 to 50°C (Charging); -10 to 50°C (Discharging) ³⁾
Norminal Voltage	51.2 V	Cooling Type	Natural Cooling
Operating Voltage Range	44.8 ~ 57.6 V	Humidity	0 ~ 95% (no condensation)
Battery Pack Round-Trip Efficiency	> 94%	BMS	
Weight	56 kg	Modules Connection	Max. 8
Dimensions (W x H x D)	725 x 370 x 190mm	Capacity	100 / 200 / 300 / 400 / 500 / 600 / 700 / 800 Ah
IP Protection	IP65	Communication	CAN
Warranty	5 Year Product Warranty, 10 Year Performance	Monitoring Parameters	System voltage, current, battery voltage, Battery temperature, PCBA temperature measurement
Certificate			
Safety and Transportation	Pack: IEC/EN 62619; UN38.3; Cell: IEC/EN 62619; UN38.3; UL1973		

1) Total Energy Capacity is tested under the following conditions: @25°C, 0.5C charging / 0.5C discharging, at the beginning of life.

2) Usable Energy Capacity refers to the energy discharged from 100% to the minimum state of energy (SoE).

3) The operating temperature parameters only apply to battery pack models with heating function. For battery pack models without heating function, the operating temperature range will be: 0 to 50°C (Charging), -10 to 50°C (Discharging).

4) Minimum voltage for inverter to start power output.





5) According to the C10/11 of Synergrid, the maximum AC apparent output power is 10 kVA. The applicable hybrid inverter model is E10KTBE-D22.

Hybrid Inverter Model	E8KT-D22	E10KT-D22	E12KT-D22
PV Input			
Recommended Max. PV Array	16 kW	20 kW	22 kW
Input Power @STC			
Max PV Voltage	1000 V		
Nominal Voltage	720 V		
MPPT Voltage Range	140 ~ 950 V		
MPPT Voltage Range with Full Load	290 ~ 800 V	320 ~ 800 V	350 ~ 800 V
Start Voltage ⁴⁾	200 V		
Number of MPPT Tracker	2		
String per MPPT Tracker	1		
Max. Input Current per MPPT	20 A		
Max. Short-Circuit Current per MPPT	25 A		
AC Output & Input (Grid)			
Max. AC Continuous Output Power	8000 W	10000 W	12000 W
Max. AC Apparent Output Power	8800 VA	11000 VA ⁵⁾	13200 VA
Max. Continuous Input Power	16000 W	20000 W	22000 W
Nominal AC Voltage	400 Vac		
Norminal Frequency	50 Hz / 60 Hz (±5 Hz)		
Norminal Output Current	11.6 A	14.5 A	17.4 A
Max. Output Current	26.1 A	26.1 A	26.1 A
Max. Input Current	35 A		
Power Factor (cosΦ)	-0.8 (Lagging) ~ 0.8 (Leading)		
THDi	< 3%		
AC Output (Backup)			
Normal AC Output Power	8000 W	10000 W	12000 W
Max. AC Output Power	8000 VA	10000 VA	12000 VA
Normal Output Current	11.6 A	14.5 A	17.4 A
Max. Output Current	26.1 A	26.1 A	26.1 A
Normal Output Voltage	400 Vac		
Nominal Output Frequency	50 Hz / 60 Hz		
Output THDv (@Linear Load)	2% (Linear Load)		
Battery Input			
Battery Type	LFP (LiFePO4)		
Nominal Battery Voltage	51.2 V		
Charging Voltage Range	44 ~ 58 V		
Max. Charging / Discharging Current	160 A / 200 A	200 A / 240 A	200 A / 240 A
Rated Charging / Discharging Power	8000 W	10000 W	10000 W / 12000 W
Battery Capacity	100 ~ 800 Ah		
Efficiency			
Max. PV Efficiency	97.2 %		
Euro. Efficiency	95.5 %		
Protection			
DC Switch	Integrated		
Anti-Islanding-Protection	Integrated		
Residual Current Monitoring	Integrated		
PV Reverse Polarity Protection	Integrated		
AC Short Circuit Protection	Integrated		
AC Overvoltage Protection	Integrated		
DC / AC Surge Protection	DC Type II; AC Type III		
Remote Shutdown	Integrated		
AFCI	Optional		
General Specification			
Dimensions (W x H x D)	725 × 490 × 245 mm		
Weight	43 kg		
Operating Temperature Range	-25°C to + 60°C (> 40°C derating)		
Cooling Type	Intelligent Fan Cooling		
Max. Operation Altitude	≤ 3000 m		
Operation Humidity	0 ~ 95% (No Convection)		
IP Class	IP66		
Topology	High Frequency Isolation		
Communication	RS-485 / WIFI / (4G / Ethernet optional)		
Display	LED+Bluetooth / APP / WEB		
Certification & Standard	IEC/EN62109-1&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 61727; IEC 62116; IEC 60068; IEC 61683; EN 50549-1; EN 50549-10; VDE-AR-N 4105; NC RfG:2018; C10/C11		



BlueGlow Series NEW

Single Phase / On-grid / 3–6 kW

-  Max. PV Voltage up to 550 V
Support High-current Bifacial Modules
-  DC / AC Ratio up to 1.5
AFCI Optional
-  Reactive Power Control
WiFi Logger Standard / 4G Logger Optional
-  High Efficiency up to 98.1%
Smaller and Lighter



MODEL	G3KS-D11	G5KS-D11	G5KS-B21	G6KS-D11	G6KS-B21
Specifications					
Max. DC Power	4.5 kWp	7.5 kWp	7.5 kWp	9.0 kWp	9.0 kWp
Max. DC Voltage	550 V				
Nominal Voltage	360 V				
Start Voltage	80 V				
MPPT Voltage Range	60 ~ 550 V				
MPPT Voltage Range at Full Load	165 ~ 500 V	265 ~ 500 V	180 ~ 500 V	330 ~ 500 V	200 ~ 500 V
No. of MPPT	1	1	2	1	2
No. of Strings per MPPT	1	1	1	1	1
Number of Strings Input	1	1	2	1	2
Max. Input Current per MPPT	20 A	20 A	16 A*2	20 A	16 A*2
Max. Short-circuit Current per MPPT	30 A	30 A	25 A*2	30 A	25 A*2
Output (AC)					
Nominal AC Output Power	3000 W	5000 W	5000 W	6000 W	6000 W
Max. AC Apparent Power	3300 VA	5500 VA	5500 VA	6000 VA	6000 VA
Max. AC Output Power	3300 W	5500 W	5500 W	6000 W	6000 W
Nominal AC Voltage	220 V / 230 V				
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)				
Rated Output Current	13.7 A / 13.1 A	22.7 A / 21.7 A	22.7 A / 21.7 A	27.3 / 26 A	27.3 A / 26 A
Maximum Output Current	15 A	25 A	25 A	27.3 A	27.3 A
Power Factor (Φ)	-0.8 (Lagging) ~ 0.8 (Leading)				
THDi	< 3% (Nominal Power)				
Efficiency					
Max. Efficiency	97.5%	98.1%	98.1%	98.1%	98.1%
Euro Efficiency	97.0%	97.5%	97.5%	97.5%	97.5%
Protection Devices					
DC Switch	Yes				
Anti-islanding Protection	Yes				
Output Over Current	Yes				
DC Reverse Polarity Protection	Yes				
String Fault Detection	Yes				
Overvoltage Category	DC Type III / Type II Optional; AC Type III				
Insulation Detection	Yes				
AC Short Circuit Protection	Yes				
AFCI Protection	Optional				
General Specifications					
Dimensions (W x H x D)	395 x 315 x 140 mm				
Weight	7.6 kg	8.2 kg	9.5 kg	8.2 kg	9.5 kg
Operating Temperature Range	-25°C ~ +60°C				
Cooling Type	Natural				
Max. Operating Altitude	≤ 4000 m				
Max. Operating Humidity	0 ~ 100%				
DC Input Terminal Type	Vaconn				
AC Output Terminal Type	Quick connector				
IP Class	IP66				
Topology	Transformerless				
Communication	RS-485*2 / WIFI / GPRS / Bluetooth				
Display	LCD / Bluetooth + App				
Certificates	IEC 62109~1/2; IEC 61000; IEC 60068; IEC 61727; IEC 62116; IEC 61683				

BlueGlow Series NEW

Single Phase / On-grid / 8-12 kW



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



DC / AC Ratio up to 1.5
AFCI Optional



Reactive Power Control
WiFi Logger Standard / 4G Logger Optional



High Efficiency up to 97.5%
Smaller and Lighter



MODEL	G8K1	G10K1	G12K1
Specifications			
Max. DC Power	12 kWp	15 kWp	18 kWp
Max. DC Voltage	600 V		
Nominal Voltage	360 V		
Start Voltage	80 V		
MPPT Voltage Range	60 ~ 550 V		
MPPT Voltage Range at Full Load	220 ~ 500 V	270 ~ 500 V	330 ~ 500 V
No. of MPPT	2		
No. of Strings per MPPT	1		
Number of Strings Input	2		
Max. Input Current per MPPT	20 A*2		
Max. Short-circuit Current per MPPT	30 A*2		
Output (AC)			
Nominal AC Output Power	8000 W	10000 W	12000 W
Max. AC Apparent Power	8000 VA	10000 VA	12000 VA
Max. AC Output Power	8000 W	10000 W	12000 W
Nominal AC Voltage	220 V / 230 V		
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)		
Rated Output Current	36.4 A / 34.8 A	45.5 A / 43.5 A	54.5 A / 52.2 A
Maximum Output Current	36.4 A	45.5 A	54.5 A
Power Factor (Φ)	-0.8 (Lagging) ~ 0.8 (Leading)		
THDi	< 3% (Nominal Power)		
Efficiency			
Max. Efficiency	98.1%		
Euro Efficiency	97.5%		
Protection Devices			
DC Switch	Yes		
Anti-islanding Protection	Yes		
Output Over Current	Yes		
DC Reverse Polarity Protection	Yes		
String Fault Detection	Yes		
Overvoltage Category	DC Type III / Type II Optional; AC Type II		
Insulation Detection	Yes		
AC Short Circuit Protection	Yes		
AFCI Protection	Optional		
General Specifications			
Dimensions (W x H x D)	380 x 483 x 161 mm	380 x 483 x 161 mm	380 x 483 x 193 mm
Weight	14 kg	14.5 kg	17.5 kg
Operating Temperature Range	-25°C ~ +60°C		
Cooling Type	Natural		
Max. Operating Altitude	≤ 4000 m		
Max. Operating Humidity	0 ~ 100%		
DC Input Terminal Type	Vaconn		
IP Class	IP66		
Topology	Transformerless		
Communication	RS-485 / WIFI / GPRS / Bluetooth		
Display	LCD / Bluetooth + App		
Certificates	IEC 62109-1/2; IEC 61000; IEC 60068; IEC 61727; IEC 62116; IEC 61683		

BluE-G Series

Single Phase / On-grid / 1–3 kW



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



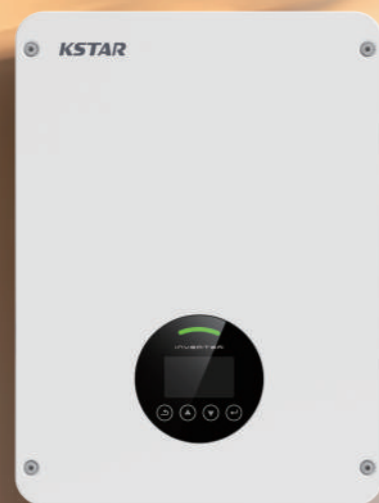
Compatible for Big Capacity PV Panel
WiFi Logger Standard / 4G Logger Optional



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 ~ 560 V	80 ~ 560 V	80 ~ 560 V	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	1000 W	1500 W	2000 W	3000 W
Max. AC Apparent Power	1100 VA	1650 VA	2200 VA	3300 VA
Nominal AC Voltage	230 V L-N			
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)			
Max. Output Current (A)	4.8 A	7.2 A	9.6 A	14.4 A
Power Factor (cosΦ)	-0.8 (Lagging) ~ 0.8 (Leading)			
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			
DC / AC Surge Protection	DC Typ III; AC Typ III			
Insulation Detection	Yes			
AC Short Circuit Protection	Yes			
General Specifications				
Dimensions (W x H x D)	350 × 290 × 120 mm			
Weight	7.3 kg	8 kg	8 kg	8 kg
Environment				
Operating Temperature Range	-25°C ~ +60°C			
Cooling Type	Natural convection			
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 / Bluetooth + App			
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 / 4–8 kW

-  Max. PV Voltage up to 600 V
DC / AC Ratio up to 1.5
-  Type III DC SPD / Type III AC SPD
IP65 Protection
-  Compatible for Big Capacity PV Panel
WiFi Logger Standard / 4G Logger Optional
-  High Efficiency up to 98.1%
Smaller and Lighter





MODEL	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 ⁵⁾	120 V	120 V	120 V	100 V
MPPT Voltage Range	80 ~ 560 V	80 ~ 560 V	80 ~ 560 V	80 ~ 540 V
Number of MPPT	2			
Strings per MPPT	1			
Max. Input Current per MPPT	15 A	15 A	15 A	26 A / 16 A ¹⁾
Max. Short-circuit Current per MPPT	18 A	18 A	18 A	31 A / 19 A
Output (AC)				
Nominal AC Output Power	4000 W	5000 W ²⁾	6000 W	8000 W
Max. AC Apparent Power	4400 VA	5500 VA ³⁾	6000 VA	8000 VA
Nominal AC Voltage	230 V L-N			
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)			
Max. Output Current	19 A	24 A ⁴⁾	26 A	35 A
THDi	-0.8 (Lagging) ~ 0.8 (Leading)			
Power Factor (cosΦ)	< 3%			
Efficiency				
Max. Efficiency	98.1%			
Euro Efficiency	97.5%			
Protection devices				
DC Switch	Yes			
Anti-islanding Protection	Yes			
Output Over Current Protection	Yes			
DC Reverse Polarity Protection	Yes			
DC / AC Surge Protection	DC Typ III; AC Typ III			
Insulation Detection	Yes			
AC Short Circuit Protection	Yes			
General Specifications				
Dimensions (W x H x D)	380 × 380 × 150 mm			
Weight	11 kg	11 kg	11 kg	13 kg
Operating Temperature Range	-25°C ~ +60°C			
Cooling Type	Natural convection	Natural convection	Natural convection	Fan cooling
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 / Bluetooth + App			
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;			

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; Max. AC apparent power is 4999 VA for Australia, 5000 VA for Belgium and 4600 VA for Germany and South Africa.
 4) Maximum output current is 16 A for England; Maximum output current is 21.7 A for Australia and 20 A for Germany and South Africa.
 5) Minimum voltage for inverter to start power output.


BluE Series NEW

Three Phase / On-grid / 10–25 kW

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

 Compatible for Big Capacity PV Panel
WiFi Logger Standard / 4G Logger Optional

 DC / AC Ratio up to 1.3
IP66 Protection

 High Efficiency up to 98.6%
Smaller and Lighter







MODEL	BluE-10KT-M6	BluE-12KT-M6	BluE-15KT-M6	BluE-20KT-M6	BluE-25KT-M6
Input (DC)					
Recommended Max. PV Array Input Power @STC	13 kW	15.6 kW	19.5 kW	26 kW	32.5 kW
Max. DC Voltage	1100 V				
Nominal Voltage	650 V				
Start Voltage	250 V				
MPPT Voltage Range	140 ~ 1000 V	140 ~ 1000 V	140 ~ 1000 V	140 ~ 1000 V	200 ~ 1000 V
MPPT Voltage Range (Full load)	420 ~ 850 V	420 ~ 850 V	420 ~ 850 V	480 ~ 850 V	480 ~ 850 V
Number of MPPT	2				
Max. Number of String per MPPT	1	1	1	2	2
Max. Input Current per MPPT	20 A	20 A	20 A	32 A	40 A / 32 A
Max. Short-circuit Current per MPPT	30 A	30 A	30 A	50 A	60 A / 50 A
Output (AC)					
Nominal AC Output Power	10000 W	12000 W	15000 W	20000 W	25000 W
Max. AC Output apparent Power	11000 VA	13200 VA	16500 VA	22000 VA	27500 VA
Max. AC Output active Power	11000 W	13200 W	16500 W	22000 W	27500 W
Nominal Voltage	400 V / 230 V, 3P+N+PE				
AC Grid Frequency Range	50 Hz / 60 Hz				
Max. Output Current	16 A	19.2 A	23.9 A	31.9 A	39.9 A
Power Factor (Φ)	-0.8 (Lagging) ~ 0.8 (Leading)				
THDi	< 3% (Nominal Power)				
Efficiency					
Max. Efficiency	98.3%	98.3%	98.3%	98.6%	98.6%
Euro Efficiency	98.0%	98.0%	98.0%	98.3%	98.3%
Protection devices					
DC Switch	Yes				
Output Over Current Protection	Yes				
Anti-islanding Protection	Yes				
DC Reverse Polarity Protection	Yes				
Insulation Detection	Yes				
DC / AC Surge Protection	DC Type II; AC Type III; Type II Optional				
Residual Current Monitoring	Yes				
AFCI	Optional				
General Specifications					
Dimensions (W x H x D)	380 x 483 x 161 mm	380 x 483 x 161 mm	380 x 483 x 193 mm	380 x 483 x 193 mm	380 x 483 x 223 mm
Weight	16 kg	16 kg	18.8 kg	18.8 kg	19.6 kg
Operating Temperature Range	-25°C ~ +60°C				
Cooling Type	Natural cooling	Natural cooling	Natural cooling	Fan cooling	Fan cooling
Max. Operating Altitude	4000 m (> 3000 m derating)				
Max. Operating Humidity	0 ~ 100%				
AC Output Terminal Type	OT				
IP Class	IP66				
Topology	Transformerless				
PV Input Terminal Type	MC4				
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 62116; IEC61727;				



BluE Series

Three Phase / On-grid / 5–12 kW

-  Max. PV Voltage up to 1100 V
Type II DC / AC SPD
-  DC / AC Ratio up to 1.3
IP66 Protection
-  Compatible for Big Capacity PV Panel
WiFi Logger Standard / 4G Logger Optional
-  High Efficiency up to 98.6%
Smaller and Lighter



MODEL	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				
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	5000 W	6000 W	8000 W	10000 W	12000 W
Maximum AC Output Power	5500 VA	6600 VA	8800 VA	11000 VA ²⁾	13200 VA
Nominal AC Voltage	400 V / 230 V, 3P+N+PE				
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)				
Maximum Output Current	8.0 A	9.6 A	12.8 A	16.0 A ²⁾	19.2 A
Power Factor (Φ)	-0.8 (Lagging) ~ 0.8 (Leading)				
THDi	< 3% (Nominal Power)				
Efficiency					
Max. Efficiency	98.4%	98.4%	98.6%	98.6%	98.6%
Euro Efficiency	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 × 483 × 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;				

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



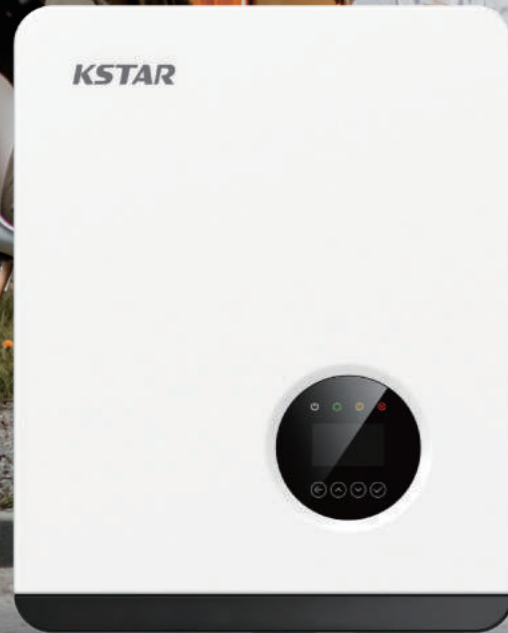
Compatible for Big Capacity PV Panel
WiFi Logger Standard / 4G Logger Optional



DC / AC Ratio up to 1.3
IP66 Protection



High Efficiency up to 98.6%
Smaller and Lighter







MODEL	BluE-15KT-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 ~ 1000 V		
Number of MPPT Tracker	2		
Strings per MPPT Tracker	2 / 1	2	2
Max. input Current per MPPT	30 A / 15 A	30 A	30 A
Max. Short-circuit Current per MPPT	40 A / 20 A	40 A	40 A
Output (AC)			
Nominal AC Output Power	15000 W	20000 W	25000 W
Max. AC Output Power	16500 VA	22000 VA	27500 VA
Nominal AC Voltage	400 V / 230 V, 3P+N+PE		
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)		
Max. Output Current	23.9 A	31.9 A	39.9 A
Power Factor (cosΦ)	-0.8 (Lagging) ~ 0.8 (Leading)		
THDi	3%		
Efficiency			
Max. Efficiency	98.6%		
Euro Efficiency	98.2%	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 × 483 × 193 mm		
Weight	20.7 kg		
Operating Temperature Range	-25°C ~ +60°C		
Cooling Type	Natural cooling	Fan Cooling	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		



BluE Series (LV)

Three Phase / On-grid / 12–20 kW

-  Max. PV voltage up to 800 V
Type II DC / AC SPD
-  DC / AC ratio up to 2
IP66 protection
-  Reactive power control
WiFi Logger Standard / 4G Logger Optional
-  High efficiency up to 98.6%
Smaller and lighter



MODEL	BluE-12KTL-M1	BluE-15KTL-M1	BluE-20KTL-M2
Input (DC)			
Max. DC Voltage		800 V	
Nominal Voltage		370 V	
Start Voltage		250 V	
MPPT Voltage Range		200 ~ 750 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	12000 W	15000 W	20000 W
Max. AC Output Power	13200 VA	16500 VA	22000 VA
Nominal AC Voltage	220 V 3L+N		
AC Grid Frequency Range	50 Hz / 60 Hz (±5 Hz)		
Max. Output Current	34.6 A	43.3 A	57.7 A
Power Factor (cosΦ)	-0.8 (Lagging) ~ 0.8 (Leading)		
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		
General Specifications			
Dimensions (W x H x D)	380 x 483 x 193 mm	380 x 483 x 223 mm	380 x 483 x 227 mm
Weight	20.7 kg	25.5 kg	32.5 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/IEC62109-1/2 ; IEC/EN61000-6-2; IEC/EN61000-6-4; IEC61683; IEC60068; IEC60529; IEC62116; IEC61727;		

GreenFlow AC Charger

Single Phase / Wall-mounted / 7 kW

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
Product Information	
Input Wiring	1P+N+PE
Rated Power	7 kW
Rated Input Voltage	230 V AC ±15%
Rated Current	32 A
Charging Mode	Mode 3
Network Type	TT, TN
Connector Type	IEC 62196 Type 2 Plug, 5 m
Protection	Over-voltage protection, under-voltage protection, short circuit protection, grounding protection, over temperature protection, lightning protection
Dimensions (W x H x D)	216 x 268 x 105 mm
Frequency	50 ~ 60 Hz
RCD	6 mA DC + 30 mA Type A
Metering	On-Board Measurement
Card Reader	Mifare ISO / IEC14443 Type A
General Characteristics	
Activation Method	Plug n' Charge & RFID Card & App
App Function	Remote start & stop, Scheduled Charging, Real-time Monitoring, Data Display, Power Adjusting
Operating Altitude	< 2000 m
Operating Temperature	-30°C ~ +50°C
Storage Temperature	-40°C ~ +50°C
Operating Humidity	5% ~ 95%
Communication	WIFI + Bluetooth
LED	RGB LED
IP Rating	IP65
IK Rating	IK10
Certification	CE
EMC	Class B
IEC Standard	EN IEC 61851-1:2019 IEC61851-1:2017 IEC61851-21-2:2021
Warranty	2 Years



Stick Logger

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



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

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: 8M Byte Flash	Default: 4M Byte Flash	Default: 8M Byte 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.

Wireless Meter Gateway Solution **NEW**

Compatible with Chint DTSU666 Meters

Flexible AP / STA Networking

One-to-many master / slave architecture for easy system expansion.

Stable Dual Communication

RS-485 + 802.11ah (868 MHz) with encrypted wireless transmission up to 200 m.

Easy Installation & Meter Compatibility

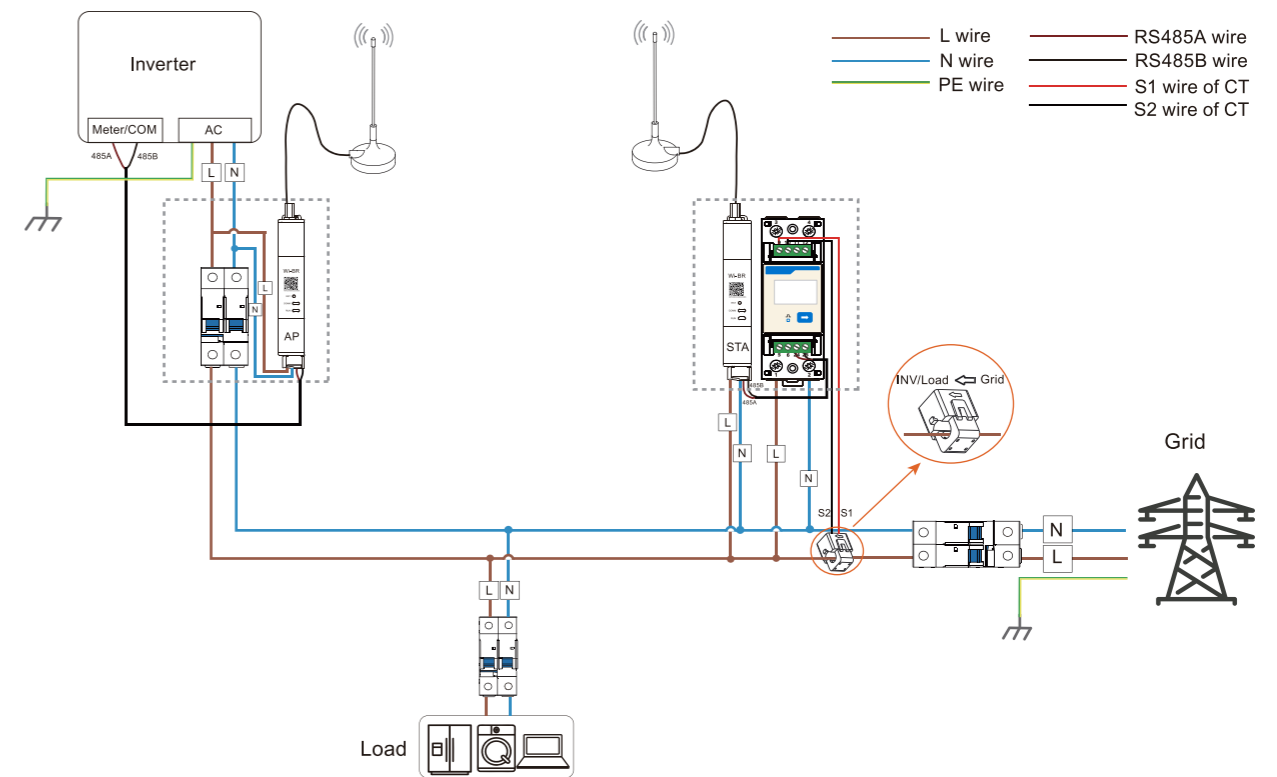
Wide input 85–277 Vac, DIN-rail mounting, fast commissioning, compatible with Chint meters.

Low Power & Smart Operation

≤2 W power consumption with LED status, remote upgrade and diagnostics.



PRODUCT NAME	SMG666-1PF1-L1
General Parameters	
Working Mode	AP (master device) / STA (slave device)
Communication Method	RS-485 / Wireless Communication
Network Protocol	IEEE 802.11 Ah
Operating Voltage	85 Vac ~ 277 Vac
Maximum Power	2 W
Operating Temperature	-25°C ~ +55°C
Wireless Frequency	868 MHz
Wireless Transmission Distance	≤ 200 m
Way To Install	DIN35 mm Rail Mounting



*Wi-BR can work with both single-phase and three-phase meters. Here uses the connection to single-phase meter and European TN-S for example.
 *Wi-BR is not waterproof. During installation, take proper waterproof measures, or place it in the power distribution cabinet or other waterproof box.

Wireless Meter Gateway (Wi-BR) Single-Phase Wiring Diagram



DDSU666 Single Phase Smart Meter 100mA/40mA -dual channels **NEW**

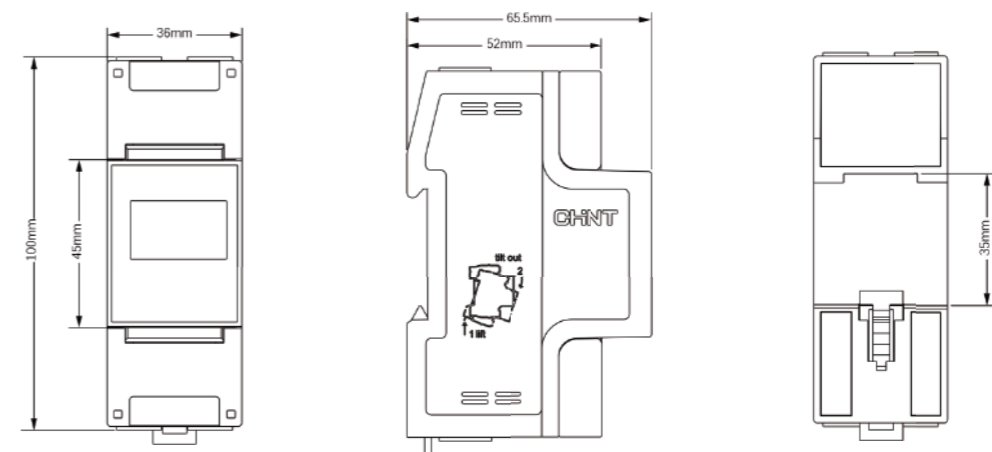
DIN Rail Energy Meter for Single Phase Electrical Systems(AC-Coupled)

- ▶ Metering function: Measurement for forward and reverse active energy;
- ▶ Measuring function: Measurement for voltage, current, frequency, power, power factor, etc;
- ▶ Display function: LCD, key-press display;
- ▶ Communication function: RS-485, support Modbus-RTU;
- ▶ Refresh rate: Active power refresh rate about 50 ms.

Technical parameter

MODEL	DDSU666
Accuracy	
Voltage	± 0.5%
Current / Power	± 0.5%
Electric Energy	± 1%
Electrical Parameters	
Grid Type	Single phase two wire (1P2W)
Reference Voltage	220 V ~ 240 V
Current Specification	100 mA / 40mA
Frequency	50 Hz / 60 Hz
Access Method	CT access CT2 access 100A / 40mA
Specified Workig Voltage Range	198 V ~ 253 V
Extended Workig Voltage Range	100 V ~ 276 V
Communication	
Interface	RS-485
Protocol	Modbus-RTU
Baud Rate	1200 / 2400 / 4800 / 9600bps(default)19200 / 115200bps(customizable)
Environment	
Specified Working Temperature Range	-25°C ~ +55°C
Extended Working Temperature Range	-40°C ~ +70°C
Relative Humidity (Non-condensing)	≤ 75%
Atmosphere	86 kPa ~ 106 kPa
Specification	
Dimension	36 mm × 100 mm × 65.5 mm (tolerance±1)
Mounting type	DIN35 mm (standard DIN-Rail mount)

Dimension:



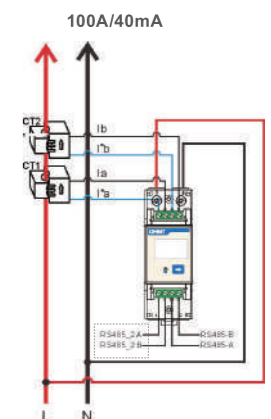
Wiring diagram:

Upper terminal

Voltage		CT1		CT2	
L	N	I*a	Ia	I*b	Ib
3	4	9	10	11	12

Lower terminal

N/A		Connection			
N/A	N/A	RS-485-2A	RS-485-2B	RS-485-A	RS-485-B
1	2	5	6	24	25



DTSU666 Three Phase Smart Meter 100mA/40mA NEW

DIN Rail Energy Meter for Single and Three Phase Electrical Systems

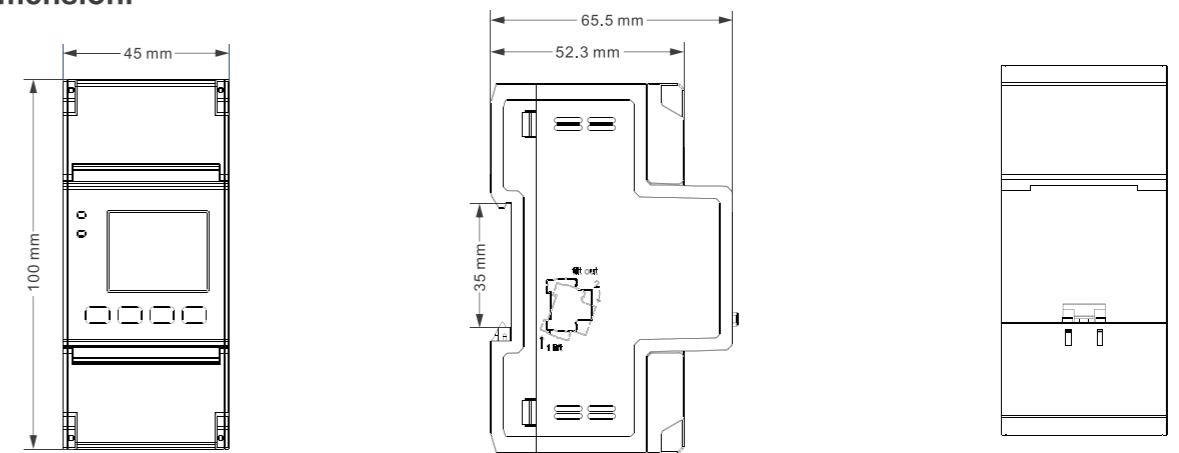
- ▶ Metering function: Measurement for forward and reverse active energy;
- ▶ Measuring function: Measurement for voltage, current, frequency, power, power factor, etc;
- ▶ Display function: LCD, key-press display;
- ▶ Communication function: RS-485, support Modbus-RTU;
- ▶ Refresh rate: Active power refresh rate about 50 ms.



Technical parameter

MODEL	DTSU666
Accuracy	
Voltage	± 0.5%
Current / Power	± 0.5%
Electric Energy	± 1%
Electrical Parameters	
Grid Type	Three phase four wire (3P4W)
Voltage Specification	3 × 220 / 380 V...3×240 / 415 V
Current Specification	100 mA / 40mA
Frequency	50 Hz / 60 Hz
Specified Workig Voltage Range	207 V ~ 253 V
Extended Workig Voltage Range	184 V ~ 264 V
Communication	
Interface	RS-485
Protocol	Modbus-RTU
Baud Rate	1200 / 2400 / 4800 / 9600bps(default)19200 / 115200bps(customizable)
Environment	
Specified Working Temperature Range	-25°C ~ +55°C
Extended Working Temperature Range	-40°C ~ +70°C
Relative Humidity (Non-condensing)	≤ 75%
Atmosphere	86 kPa ~ 106 kPa
Specification	
Dimension	45 mm × 100 mm × 65.5 mm (allowance±1)
Mounting type	DIN35 mm (standard DIN-Rail mount)

Dimension:



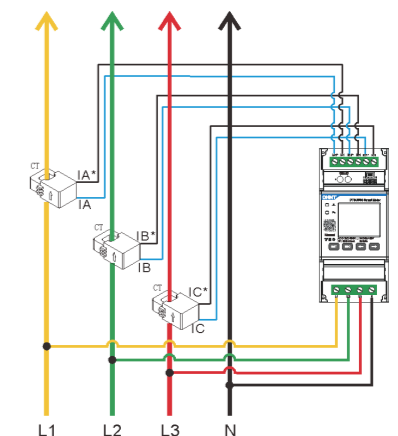
Wiring diagram:

Upper terminal

CT access						Communication	
I*a	Ia	I*b	Ib	I*c	Ic	RS-485-A	RS-485-B
I*a	Ia	I*b	Ib	I*c	Ic	RS-485-A	RS-485-B

Lower terminal

Voltage input			
Ua	Ub	Uc	N
L1	L2	L3	N





DTSU666 Three Phase Dual Channel Smart Meter 250mA/50mA NEW

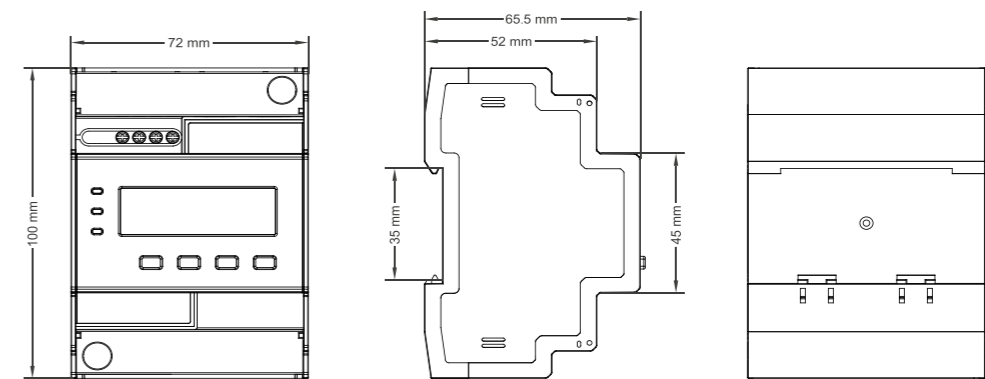
DIN Rail Energy Meter for Single and Three Phase Electrical Systems (AC-Coupled)

- ▶ Metering function: Measurement for forward and reverse active energy;
- ▶ Measuring function: Measurement for active energy and voltage, current, frequency, power, power factor, etc;
- ▶ Display function: LCD, key-press display;
- ▶ Communication function: RS485, support Modbus-RTU;
- ▶ Refresh rate: Active power refresh rate about 50 ms.

Technical parameter

MODEL	DTSU666
Accuracy	
Voltage	± 0.5%
Current / Power	± 0.5%
Electric Energy	± 1%
Electrical Parameters	
Grid Type	Three phase four wire (3P4W)
Voltage Specification	AC 3 x 57.7 / 100 V...3 x 240 / 415 V
Current Specification	250 mA / 50mA
Frequency	50 Hz / 60 Hz
Specified Working Voltage Range	207 V ~ 253 V
Extended Working Voltage Range	184 V ~ 264 V
Communication	
Interface	RS-485
Protocol	Modbus-RTU
Baud Rate	1200 / 2400 / 4800 / 9600bps(default)19200 / 115200bps(customizable)
Environment	
Specified Working Temperature Range	-25°C ~ +55°C
Extended Working Temperature Range	-40°C ~ +70°C
Relative Humidity (Non-condensing)	≤ 75%
Atmosphere	86 kPa ~ 106 kPa
Specification	
Dimension	72 mm × 100 mm × 65.5 mm (allowance±1)
Mounting type	DIN35 mm (standard DIN-Rail mount)

Dimension:



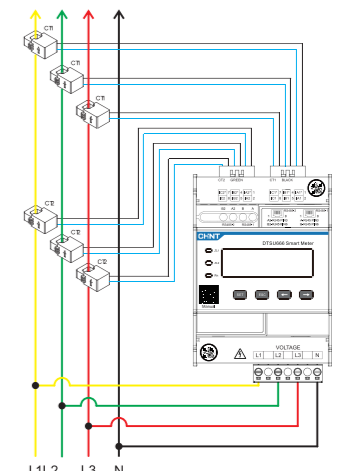
Wiring diagram:

Upper terminal

CT						Communication	
I*a	Ia	I*b	Ib	I*c	Ic	RS-485-A	RS-485-B
13	14	16	17	19	21	RS-485-A	RS-485-B

Lower terminal

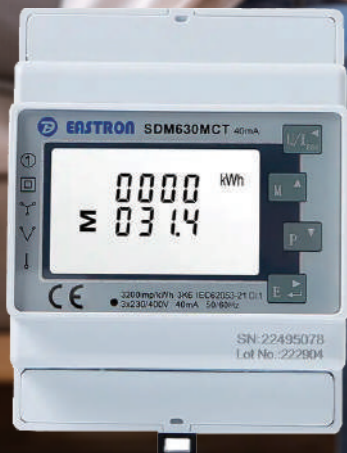
Voltage input			
Ua	Ub	Uc	N
L1	L2	L3	N



SDM630MCT40mA Smart Meter

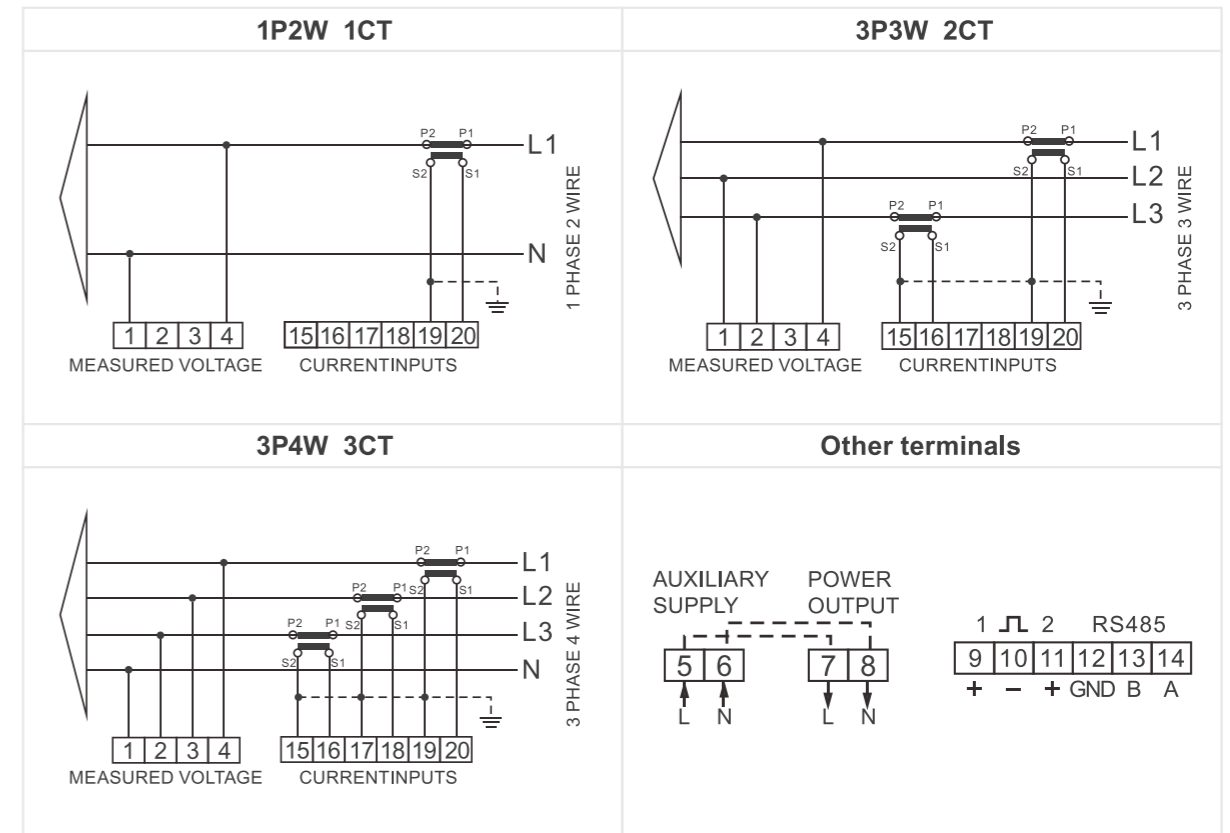
DIN Rail Energy Meter for Single and Three Phase Electrical Systems

- ▶ Measures kWh kVArh, kW, kVAr, 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 / Primary	40 mA / 120 A
Rated Voltage (Un)	380 / 400 V a.c.
Operating Voltage Range	173 to 480 V a.c. (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

* 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.



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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 Lithuania



02 Residential ESS Project in the Netherlands



03 Residential ESS Project in the Netherlands



04 Residential ESS Project in the Netherlands



05 Residential ESS Project in Ukraine



06 Residential ESS Project in Ukraine



07 Residential ESS Project in Bulgaria



08 Residential Solar Project in Brazil



09 Residential ESS Project in Italy



10 Residential ESS Project in the Netherlands



11 Residential Solar Project in Brazil



12 Residential ESS Project
in Europe



13 Residential ESS Project
in Europe



14 Residential Solar Project
in Brazil



15 Residential ESS Project
in Belgium