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YOUR ENERGY FUTURE

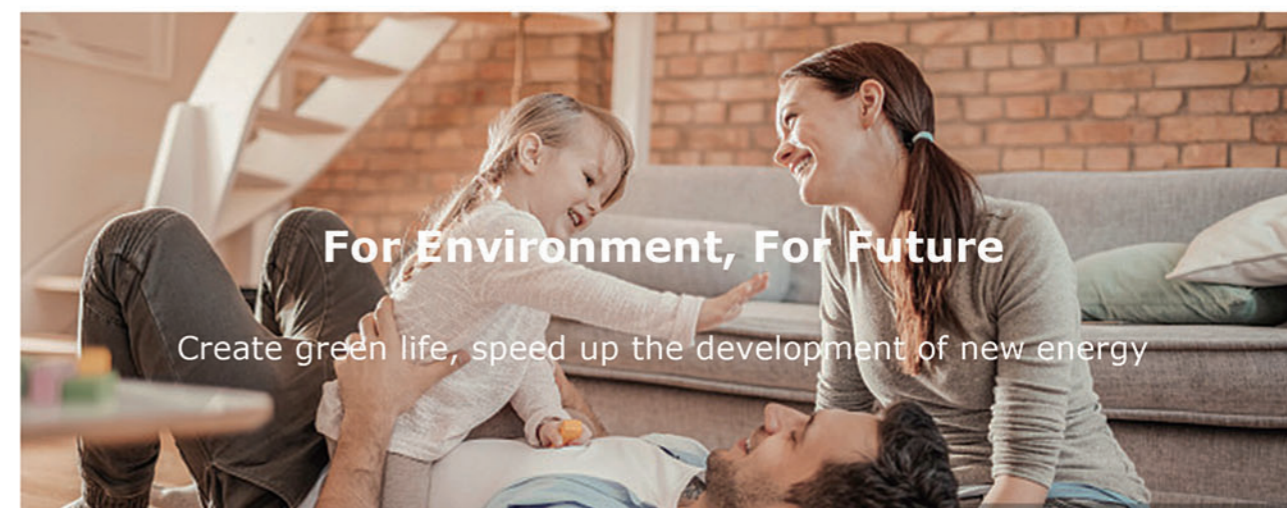
TAP INTO THE SUN WITH
KOYOE ENERGY

KOYOE
ENERGY STORAGE WORLD

www.koyoe.com

Company Profile

KOYOE is a specialist focusing on the R&D, production, and sales of distributed energy storage applications: hybrid inverters, all-in-one energy storage solutions, photovoltaic grid-connected inverters, battery packs, BMS, EMS, etc., and providing overall energy storage technology service and support. Adhering to the market demand-oriented, technological innovation as the driving force for development, and committed to the continuous innovation of energy storage technology, KOYOE strives to become the leader in the field of distributed energy storage in the next three years.



For Environment, For Future

Create green life, speed up the development of new energy



Professional team Advanced technology

Excellent professional R&D team, exquisite industry technology, cooperate with domestic first-class universities, keep innovating and lead the new energy era.



Ensure Quality Safe and Reliable

Advanced production technology, fully automated production equipment, strict product in and out inspection, all for providing you with safe and reliable products.



Energy service Brand enterprise

With green energy product, purpose of serving the world, goal of improving the global environment, Koyoe is on the way to bring a clean future.

5kW Hybrid Inverter / Single-phase

Suitable for intelligent switching on/off of small and medium-sized household systems



Easy Installation



Ultra-silent



IP65 protection



► Integrated design for PV and energy storage

Integrate PV and energy storage, supporting various kinds of batteries.

► Smart switching

UPS function, on/off grid switch within 10ms.

► Wide voltage input range

Wide PV voltage input range 120V-500V, wide batteries voltage range 85V-450V;

► Safe and reliable

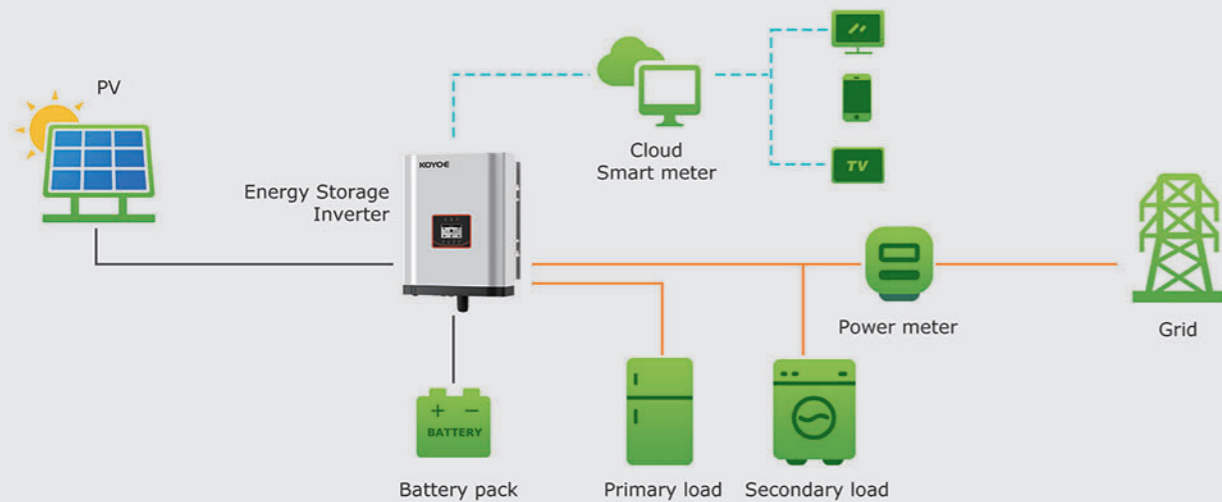
IP65 protection, high Electricity quality, no interference with other equipment.

► Smart and simple

Small size, light and easy to install, ultra-silent, flexible communications.

► High-efficiency

Max Efficiency 97.8%, Smart MPPT, tracing efficiency up to 99.99%.



Model	KY-1Hybrid-5K0-H	
Efficiency	Max.Efficiency	>98.2%
PV Input	Max. PV input power(W)	7000
	Max. PV input voltage(V)	550
	MPPT Operation Voltage Range(V)	120-500
	Number of MPPT/PV Strings	2/1
	Max. PV input current(A)	12/12
	Short-circuit current of PV input(A)	15/15
Battery	Max Input/Output Voltage(V)	450
	Operating Voltage Range(V)	85-450
	Max Charge/Discharge Current(A)	25/25
	Max Input/Output Power(W)	5000/5000
	Battery Type	Li-ion/Lead-acid
AC Input and Output	Rated Power(W)	5000
	Max. Apparent AC Power(VA)	5000
	Nominal AC Voltage(Vac)	230,1φ(L/N/PE)
	AC Power Frequency(Hz)	50/60
	Max. AC Output Current(A)	21.7
	Power Factor Range	~1 (Adjustable from 0.8 leading to 0.8 lagging)
	OutputTHDi(@Nominal Output)	<3%
	Rated Output Power(W)	5000
	Max. Apparent AC Output Power(VA)	5000
	Off-Grid AC Output (Back-up AC Output)	Nominal AC Output Voltage(Vac)
	AC Power Frequency(Hz)	50/60
	Max. AC Output Current(A)	21.7
General Data	Operating Temperature Range	-25°C ...+60°C(>45°C derating)
	Operating Altitude(m)	<4000
	Noise(dB)	<40
	Topology	Transformerless
	Cooling Method	Natural convection
	Ingress Protection Rating	IP65
	Relative Humidity	0-100%, no condensation
	DC Connection Type	MC/Amphenol/Phoenix
	AC Connection Type	Plug-in Connector
	Display	LCD
	Communication With Portal	RS485 (WiFi/GPRS Optional)
	Communication With BMS	CAN
	Communication With Meter	RS485
Mounting Method	Wall-mounting bracket	
Dimensions (W*D*H)(mm)	390*500*185	
Weight(Kg)	18	
Certification	Safety	IEC62109-1/-2
	EMC	EN61000-6-1/-2/-3,IEC61000
	On-Grid standard	AS4777.2,NRS097-2-1:2017

6-10kW Hybrid Inverter / Three-phase

Suitable for medium and big-sized household systems and intelligent switching on/off



Easy Installation



Ultra-silent



IP65 protection



► PV & storage system

Integrated PV and storage system model, high self-use efficiency, with UPS Uninterrupted Power Supply;

► Smart switching

UPS function, supporting three-phase imbalance, on/off grid switch within 10ms;

► Wide voltage input range

Wide PV voltage input range 180V-950V, wide batteries voltage range 180V-550V;

► Safe and reliable

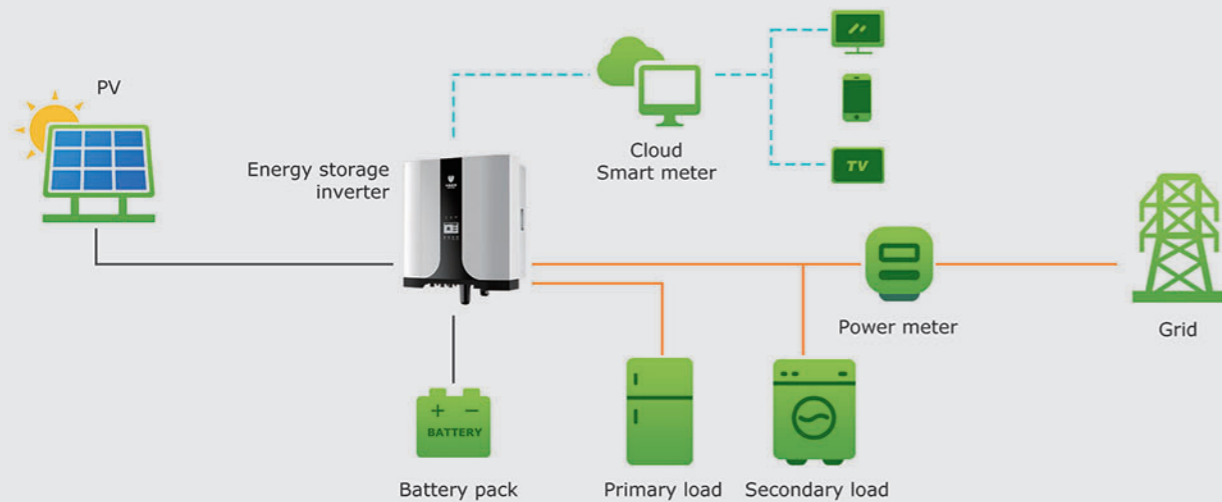
IP65 protection, high electricity quality, no interference with other equipment, low radiation;

► Smart and simple

Small size, light and easy to install, support GPRS/WIFI/RS485/USB upgrade;

► High-efficiency

Max Efficiency 98.2%, smart MPPT, tracing efficiency up to 99.99%.



Model		KY-EST06KH	KY-EST08KH	KY-EST10KH
Efficiency	Max. Efficiency	>98.2%	>98.2%	>98.2%
PV Input	Max. PV input power(W)	7800	10400	13000
	Max. PV input voltage(V)	1000	1000	1000
	MPPT Operation Voltage Range(V)	180-950	180-950	180-950
	Number of MPPT/PV Strings	2/1	2/1	2/1
	Max. PV input current(A)	12.5/12.5	12.5/12.5	12.5/12.5
	Short-circuit current of PV input(A)	15/15	15/15	15/15
Battery	Max Input/Output Voltage(V)	550	550	550
	Operating Voltage Range(V)	180-550	180-550	180-550
	Max Charge/Discharge Current(A)	25/30	25/30	25/30
	Max Input/Output Power(W)	6000/6000	8000/8000	10000/10000
	Battery Type	Li-ion/Lead-acid	Li-ion/Lead-acid	Li-ion/Lead-acid
AC Input and Output	Rated Power(W)	6000	8000	10000
	Max. Apparent AC Power(VA)	6000	8000	10000
	Nominal AC Voltage(Vac)	380,3L/N/PE	380,3L/N/PE	380,3L/N/PE
	AC Power Frequency(Hz)	50/60	50/60	50/60
	Max. AC Output Current(A)	10	12	15
	Power Factor Range	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
	OutputTHDi(@Nominal Output)	<3%	<3%	<3%
	Rated Output Power(W)	6000	8000	10000
	Max. Apparent AC Output Power(VA)	6000	8000	10000
	Nominal AC Output Voltage(Vac)	380,3L/N/PE	380,3L/N/PE	380,3L/N/PE
Off-Grid AC Output (Back-up AC Output)	AC Power Frequency(Hz)	50/60	50/60	50/60
	Max. AC Output Current(A)	10	12	15
	Operating Temperature Range	-25°C ... +60°C (>45°C derating)		
	Operating Altitude(m)	<4000		
General Data	Noise(dB)	<40		
	Topology	Transformerless		
	Cooling Method	Natural convection		
	Ingress Protection Rating	IP65		
	Relative Humidity	0-100%, no condensation		
	DC Connection Type	MC/Amphenol/Phoenix		
	AC Connection Type	Plug-in Connector		
	Display	LCD		
	Communication With Portal	RS485 (WIFI/GPRS Optional)		
	Communication With BMS	CAN		
	Communication With Meter	RS485		
	Mounting Method	Wall-mounting bracket		
	Dimensions (W*D*H)(mm)	505*570*220		
	Weight(Kg)	21	23	23
	Certification	Safety	IEC62109-1/-2	
EMC		EN61000-6-1/-2/-3, IEC61000		
On-Grid standard		AS4777.2, NRS097-2-1:2017		

12-20kW Hybrid Inverter / Three-phase

Suitable for medium and big-sized commercial and household systems; intelligent switching on/off



Easy Installation



Ultra-silent



IP65 protection



► PV & storage system

Integrate PV and storage system modem, support multiple batteries, integrate with EMS Smart energy management systems;

► Smart switching

UPS function, support three-phase imbalance, on/off grid switch within 10ms;

► Wide voltage input range

Wide PV voltage input range 180V-950V, wide batteries voltage range 180V-700V;

► Safe and reliable

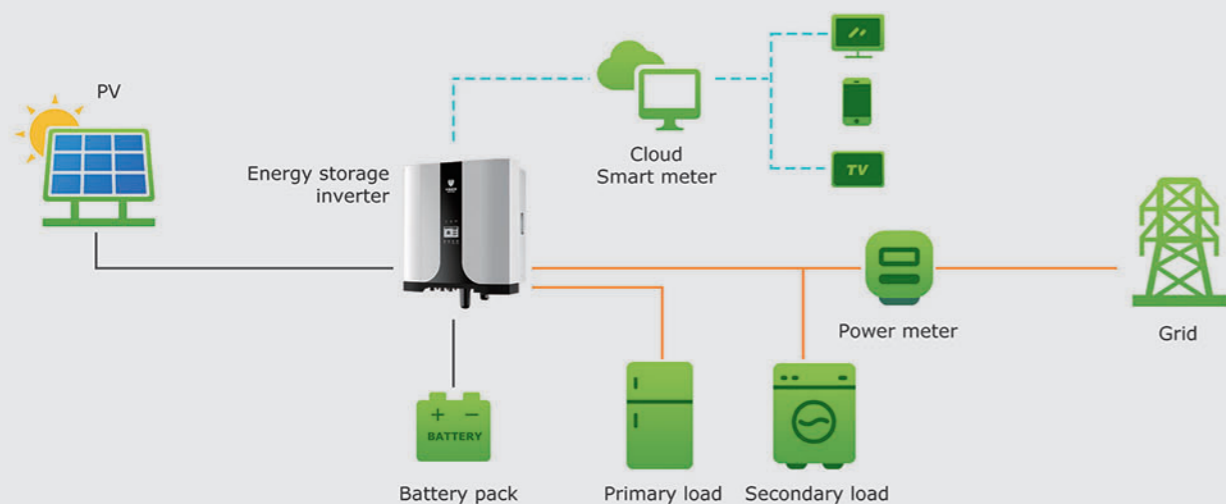
IP65 protection, aluminum housing, Built-in lightning protection, high-precision leakage protection;

► Smart and simple

Ultra silent, flexible communications, support remote/local USB upgrade;

► High-efficiency

support bifacial panels, max DC current 12.5A, max PV input power up to 1.3 X rated power.



Model		KY-EST12KH	KY-EST15KH	KY-EST17KH	KY-EST20KH	
Efficiency	Max. Efficiency	>98.2%	>98.2%	>98.2%	>98.2%	
	Max. PV input power(W)	15600	19500	22100	26000	
PV Input	Max. PV input voltage(V)	1000	1000	1000	1000	
	MPPT Operation Voltage Range(V)	180-950	180-950	180-950	180-950	
	Number of MPPT/PV Strings	2/1	2/2	2/2	2/2	
	Max. PV input current(A)	12.5/12.5	12.5/23	23/23	23/23	
	Short-circuit current of PV input(A)	15/15	15/30	30/30	30/30	
Battery	Max Input/Output Voltage(V)	700	700	700	700	
	Operating Voltage Range(V)	180-700	180-700	180-700	180-700	
	Max Charge/Discharge Current(A)	50/50	50/50	50/50	50/50	
	Max Input/Output Power(W)	12000/12000	15000/15000	17000/17000	2000/20000	
AC Input and Output	Battery Type	Li-ion/Lead-acid	Li-ion/Lead-acid	Li-ion/Lead-acid	Li-ion/Lead-acid	
	Rated Power(W)	12000	15000	17000	20000	
	Max. Apparent AC Power(VA)	12000	15000	17000	20000	
	Nominal AC Voltage(Vac)	380,3L/N/PE	380,3L/N/PE	380,3L/N/PE	380,3L/N/PE	
	AC Power Frequency(Hz)	50/60	50/60	50/60	50/60	
	Max. AC Output Current(A)	18	22	25	31	
	Power Factor Range	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
	Output THDI(@Nominal Output)	<3%	<3%	<3%	<3%	
	Off-Grid AC Output (Back-up AC Output)	Rated Output Power(W)	12000	15000	17000	20000
		Max. Apparent AC Output Power(VA)	12000	15000	17000	20000
Nominal AC Output Voltage(Vac)		380,3L/N/PE	380,3L/N/PE	380,3L/N/PE	380,3L/N/PE	
Max. AC Output Current(A)		18	22	25	31	
General Data	Operating Temperature Range	-25°C ... +60°C (>45°C derating)				
	Operating Altitude(m)	<4000				
	Noise(dB)	<45				
	Topology	Transformerless				
	Cooling Method	Intelligent Fan				
	Ingress Protection Rating	IP65				
	Relative Humidity	0-100%, no condensation				
	DC Connection Type	MC/Amphenol/Phoenix				
	AC Connection Type	Plug-in Connector				
	Display	LCD				
	Communication With Portal	RS485 (WiFi/GPRS Optional)				
	Communication With BMS	CAN				
	Communication With Meter	RS485				
Mounting Method	Wall-mounting bracket					
Dimensions (W*D*H)(mm)	505*630*220					
Weight(Kg)	22	23	24	24		
Certification	Safety	IEC62109-1/-2				
	EMC	EN61000-6-1/-2/-3, IEC61000				
	On-Grid standard	AS4777.2, NRS097-2-1:2017				

30-60kW Hybrid Inverter

Suitable for industrial energy storage system, on/off-grid seamless switching, stable operation



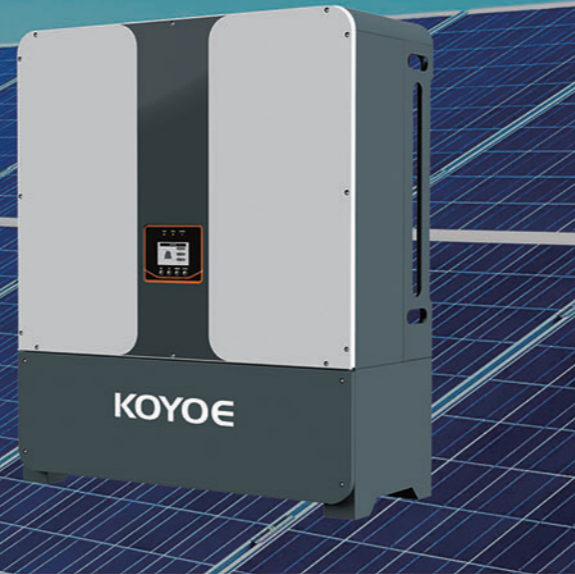
Easy Installation



Ultra-silent



IP54 protection



► PV & Storage system

Integrated PV and storage system model, supporting various kinds of batteries, and integrates EMS smart energy management system;

► Smart switching

Modular design, supporting multiple parallel connections, expandable power and capacity;

► Wide voltage input range

Wide PV voltage input range 180V-1000V, wide batteries voltage range 220V-800V;

► Safe and reliable

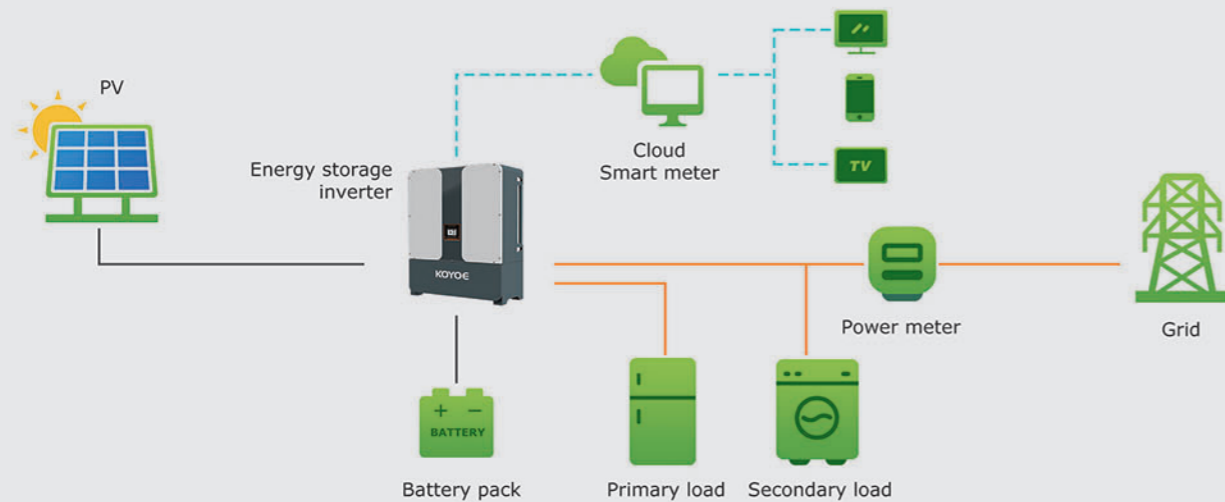
IP54 protection, all-aluminum design, built-in anti-lightning protection, high precision leakage protection;

► Smart and simple

Ultra silent, flexible communications, support remote/local USB upgrade;

► Efficient power generation

High-current instantaneous charge-discharge switching to improve power generation efficiency.



Model		KY-EST30KH	KY-EST40KH	KY-EST50KH	KY-EST60KH
PV input parameters	Maximum input power (W)	36000	48000	60000	72000
	Maximum input voltage (d.c.V)	1000	1000	1000	1000
	MPPT operating voltage range (d.c.V)	180-900/630	180-900/630	180-900/630	180-900/630
	MPPT operating voltage range at rated power (d.c.V)	300-900	400-900	400-900	450-900
	Starting voltage (d.c.V)	180	180	180	180
	Maximum input current (d.c.A)	36/36/36	36/36/36	36/36/36/36	36/36/36/36
	Maximum short circuit current (d.c.A)	42/42/42	42/42/42	42/42/42/42	42/42/42/42
Grid-connected parameters (AC)	Number of MPPT channels and strings	2/2/2	2/2/2	2/2/2/2	2/2/2/2
	Rated power (W)	30000	40000	50000	60000
	Maximum apparent power (VA)	30000	40000	50000	60000
	Rated Voltage(Vac)	400,3L/N/PE	400,3L/N/PE	400,3L/N/PE	400,3L/N/PE
	Rated frequency(Hz)	50/60	50/60	50/60	50/60
	Maximum current (a.c.A)	45	60	75	87
	Power factor range	0.8 ind...0.8 cap	0.8 ind...0.8 cap	0.8 ind...0.8 cap	0.8 ind...0.8 cap
Current THD(@rated power)	<3%	<3%	<3%	<3%	
Battery Port	Maximum input/output voltage (d.c.V)	800	800	800	800
	Operating voltage range (d.c.V)	220-800	220-800	220-800	220-800
	Maximum charge/discharge current (d.c.A)	100/100	100/100	100/100	100/100
	Maximum input/output power (W)	30000	40000	50000	60000
	Battery type	Lithium battery/lead-acid battery			
Off-grid parameters (Backup AC output)	Rated voltage (a.c.V)	400,3L/N/PE	400,3L/N/PE	400,3L/N/PE	400,3L/N/PE
	Rated frequency(Hz)	50/60	50/60	50/60	50/60
	Rated output current (a.c.A)	45	60	75	87
	Rated output power (W)	30000	40000	50000	60000
	Maximum apparent output power (W)	30000	40000	50000	60000
	Maximum single-phase apparent output power (VA)	10000	13000	17000	20000
Efficiency	On/off-grid switching time	<10ms	<10ms	<10ms	<10ms
	Maximum efficiency	>98.2%	>98.2%	>98.2%	>98.4%
Protection parameters	AC overcurrent protection	Yes	Yes	Yes	Yes
	Ground fault detection protection	Yes	Yes	Yes	Yes
	Power grid monitoring protection	Yes	Yes	Yes	Yes
	Residual current detection protection	Yes	Yes	Yes	Yes
Basic parameters	Dimensions (W/H/D)	800*600*280mm			
	Weight(Kg)	50			
	Operating temperature range (°C)	-25°C ...+60°C(>45°C derating)			
	Noise (dB)	<=40dB(A)			
	Working altitude (m)	<=4000m(>2000m derating)			
	Static loss	<1W			
	Topology	Transformerless			
	Cooling method	Integrated fan			
	Ingress protection rating	IP54			
	Relative humidity	5-90%			
	DC interface type	Push-in terminal			
	AC interface type	Terminal block			
	Display	LCD			
	Communication method	RS485 (WiFi/GPRS optional)			
Installation method	wall-mounted/floor-standing				

04 New Energy Monitoring Platform

▶▶▶ About platform

Through Koyoe new energy monitoring platform, users can centrally monitor, store, analyze and display the data and operation status of the power station, so as to know the operation management status of the power plant and the data energy efficiency analysis, and estimate the revenue, so as to provide a substantial scientific basis for the economic operation and the design of the power station. Through real-time communication technology, the fault information is processed and diagnosed quickly, which provides technical support for the safe operation of the power station.



Mobile APP at user's end

PC platform interface

▶▶▶ Platform features

- 1 Manage user's information and power plant equipment;
- 2 Check relevant data such as operation status, power generation and revenue, and has report function;
- 3 Visual interface, displaying the data as well as the operation status of the power station and its equipment in the form of charts;
- 4 Has the functions of checking version information, online updating, collecting user feedback, remote inverter upgrading, etc;
- 5 Diagnose faults remotely so as to ensure safety and reliability even if no one is on duty in the power station;
- 6 Can dispatch and control local grid , realizing functions of TS, TM, TC, TA and TV.

● Monitoring at any time the operation status, power generation capacity and revenue of the power plant!

