

12-20kW Hybrid Inverter / Three-phase (Built-in)

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

- Easy Installation
- Ultra-silent
- Smart air-cooling



► PV & storage system

Integrate PV and storage system modern, 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

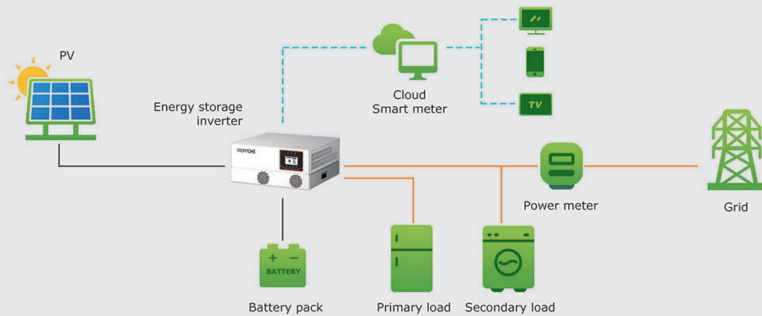
Aluminum housing, Built-in lightning protection, high-precision leakage protection;

► 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		Y-EST12KH-A	Y-EST15KH-A	Y-EST17KH-A	Y-EST20KH-A
Efficiency	Max. Efficiency	>98.2%	>98.2%	>98.2%	>98.2%
	Max. PV input power(W)	15600	19500	22100	26000
	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
PV Input	Short-circuit current of PV input(A)	15/15	15/30	30/30	30/30
	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
	Battery Type	Li-Ion/Lead-acid	Li-Ion/Lead-acid	Li-Ion/Lead-acid	Li-Ion/Lead-acid
Battery	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%
	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
AC Input and Output	AC Power Frequency(Hz)	50/60	50/60	50/60	50/60
	Max. AC Output Current(A)	18	22	25	31
	Operating Temperature Range	-25°C ... +60°C (>45°C derating)			
	Operating Altitude(m)	<4000			
General Data	Noise(dB)	<45			
	Topology	Transformerless			
	Cooling Method	Intelligent Fan			
	Ingress Protection Rating	IP20			
	Relative Humidity	5-85%, no condensation			
	DC Connection Type	Drawer type			
	AC Connection Type	Drawer type			
	Display	LCD			
	Communication With Portal	RS485 (WiFi/GPRS Optional)			
	Communication With BMS	CAN			
	Communication With Meter	RS485			
	Mounting Method	Built-in drawer mounting			
	Dimensions (W*D*H)(mm)	505*540*230			
	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			