HOUSEHOLD ENERGY STORAGE SYSTEM

SMALL INDUSTRIAL & COMMERCIAL HYBRID SOLAR INVERTER

E 29.9kW~63.5kW/150~800V

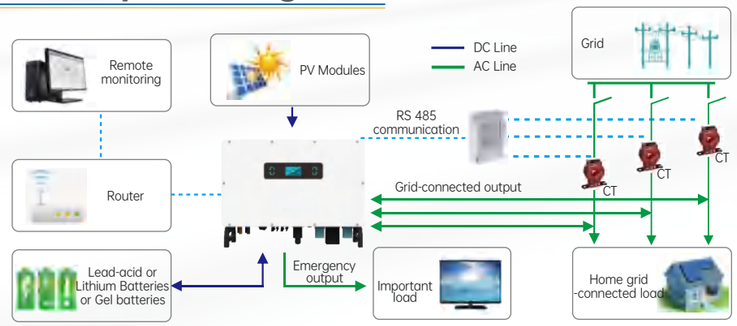
Application Scenarios

light commercial three-phase hybrid energy storage system, is applicable to newly installed or modified photovoltaic energy storage system, AC 380V/400V output

Product Highlights

- It has the function of soft start when closing the battery switch, which can eliminate the starting inrush current, protecting both the machine and the battery.
- The PV power can reach up to twice the rated power, and it simultaneously supports full-power grid connection as well as charging and energy storage.
- The charging and discharging ripple is small,which can extend the service life of the battery.
- The Maximum Supports up to 15 parallel machines,Meet users' capacity expansion needs.
- It is equipped with a multi-functional generator interface, enabling intelligent switching and control, thus saving additional investment.
- Both the AC input port and the generator interface can be connected to the PV grid -connected inverter for renovating the original PV system.
- 4.3-inch 65K-color HD touch screen, supporting customization of languages worldwide.
- Set the charging and discharging time periods according to the time-of-use electricity price.
- With an IP66 protection rating, it can be installed outdoors.

Application System Diagram



HB3299EH800~HB3635EH800 Parameters

MODEL	HB3299EH800	HB3360EH800	HB3408EH800	HB3510EH800	HB3635EH800
PV Input					
Max PV Input Power	60kW	72kW	81.6kW	102kW	127kW
Max PV Input Voltage	1000Vdc				
PV Input Starting Voltage	180Vdc				
MPPT Input Voltage	150~850Vdc				
MPPT Full Load Voltage Range	250~850Vdc	360~850Vdc	420~850Vdc	420~850Vdc	450~850Vdc
PV Max Input Current	40A+40A+40A	40A+40A+40A	40A+40A+40A+40A		
PV Short-circuit Current	60A+60A+60A	60A+60A+60A	60A+60A+60A+60A		
Number of MPPT / Strings Per MPPT	3/2+2+2	3/2+2+2	4/2+2+2+2		
AC Output					
Rated Output Volt/Freq Range	220/380Vac, 230/400Vac, 50/60Hz(±5), Intelligent adaptive/Settable				
Grid Voltage Range	Local grid standard mode / Custom mode: 90Vac~280Vac (configurable)				
Rated Output Current	45.3/43.3A	54.4/52A	61.6/58.9A	76.9/73.6A	95.9/91.7A
Max Grid-connected Current	45.3/43.3A	59.8/57.2A	67.7/64.8A	84.7/81A	95.9/91.7A
Rated Grid-connected Power	29.9kW	36kW	40.8kW	51kW	63.5kW
Max Grid-connected Viewing Power	32.89kVA	39.6kVA	44.9kVA	56.1kVA	63.5kVA
Max Grid-connected Active Power	29.9kW	36kW	40.8kW	51kW	63.5kW
DC Component	< 0.5% In				
Grid Type	Three-phase, 3L+N+PE				
Output Power Factor(cosΦ)	> 0.99 @ Rated power (Adjustable 0.8 leading~0.8 lagging)				
THDi	< 3%				
THDu	< 2%(Linear load)				
Transfer Time	10ms(Typical value)				
Off-grid Overload Capability	<110%Long-term work, 110%-120% 1min , >120% 10S				
Battery Input					
Battery Type	Lead-acid, lithium batteries, gel batteries, etc				
Charging Mode	3-section Type/Equilibrium/Self-adaption BMS				
Battery Voltage	150~800V				
Max Discharge Current	70A+70A				
Max Charging Current	70A+70A				
Max Charge/Discharge Power	2				
Efficiency					
Max PV Conversion Efficiency	98%				
European Efficiency	97.6%				
PV Charging Efficiency	98.6%				
Max Battery Charging/discharging Efficiency	97.6%				
General Parameters					
Display	Touch Screen+LED				
Communication Mode	Standard: RS485/CAN/DRM, Optional 4G/WIFI/GPRS/Temperature compensation module				
Protection function	Island Protection, AC Output Overcurrent Protection, AC Short Circuit Protection, DC Reverse Connection Protection, Optional:Integrated AFCI (DC arc fault protection)				
Surge Protection	DC Type II / AC Type III				
Noise (dB)	< 65				
Cooling	Intelligent fan				
Operating Ambient Temperature	-40°C ~ 60°C(> 45°C Derating)				
Humidity	0~100%				
Altitude	4000m (>3000m Derating)				
Electricity Consumption At Night	25W				
Protection Degree	IP66				
Installation Method	Wall-mounted				
Dimension. W*D*H(mm)	850*300*535				
Weight (kg)	62				
Warranty	5 years standard/10 years optional				
Certifications					
Certification standard	IEC 62109-2 2011, IEC 62109-1 2010, EN/IEC 50549-10, VDE-4105, EC 60529:1989/AMD:2013, GB/T 4208-2017 EN/IEC 61000-6-3:2021, EN 61000-3-12:2011, EN/IEC 61000-3-12:2019, EN/IEC 61000-6-1:2019, RoHS				

Specifications are subject to change without advance notice.