

# Three Phase Hybrid Inverter

Hybrid inverters can convert direct current into alternating current and store energy in batteries. Can be used to optimize self-consumption. Batteries can store it for future use or feed it into the public grid. The working mode depends on the photovoltaic energy and user preferences. For example, during peak electricity usage periods, inverters can prioritize the use of electricity from batteries to reduce the burden on the power grid. When the electricity price on the grid is low, inverters can store excess electricity for future use.



## Product Core Highlights



2 MPPT/4-channel string input, maximum input current of 26A



The critical load UPS and off grid switching time is less than 10ms



Fanless natural heat dissipation



Support three-phase unbalanced loads



Support 1.1 times continuous overload when connected to the grid and 1.5 times short-term overload when disconnected from the grid

# HOUSEHOLD ENERGY STORAGE PRODUCTS



Product Mode	ESS1-8K3P-02-HV	ESS1-10K3P-02-HV	ESS1-12K3P-02-HV
<b>Input DC(PV)</b>			
Recommended max.PVpower	12kW	15kW	18kW
Max.input voltage	1000V		
Rated input voltage	600V		
Start-up voltage	200V		
MPPT voltage range	200-850V		
Max. input current	26A/26A		
Max. short circuit current	39A/39A		
MPPT number/Max.input stings number	2/4		
<b>Input/Output DC(Battery)</b>			
Battery type	Li-ion		
Battery voltage range	180V-600V		
Max.charge/discharge power	8kW	10kW	
Max.charge/discharge current	30A		
Communication Mode	RS485/CAN		
<b>Output Ac</b>			
Rated output power	8kW	10kW	12kW
Max. output power	8.8kW	11kW	13.2kW
Max,apparent output power	8.8kVA	11kVA	13.2kVA
Rated output current	12.1A	15.2A	18.2A
Max.output current	13.4A	16.7A	20A
Switching time of grid-connected and off-grid	< 10ms		
Rated grid output voltage/frequency	3L/N/PE 380V/400V 50Hz/60Hz		
Power factor	0.8 leading ...0.8 lagging		
THDv(@linear load)	< 3%		
THDi	< 2%		
<b>Input AC</b>			
Max.apparent input power	8.8kVA	11kVA	13.2kVA
Max.input current	13.4A	16.7A	20A
Rated grid input voltage/frequency	3L/N/PE 380V/400V 50Hz/60Hz		
<b>Efficiency</b>			
Max. efficiency	98.10%		
<b>Standard</b>			
Safety	IEC62109-1/-2		
EMC	EN61000-6-1/EN61000-6-3		
<b>System Data</b>			
Dimensions (W*H*D)	556mmx482mmx196mm		
Cooling concept	Natural		
Weight	27.5kg		
Degree of protection	IP66		
Operating ambient temperature	-25-60°C (>45 derating)		
Max.operation attitude	3000m		
Communication Mode	RS485/WIFI/GPRS/LAN		