



PRODUCT OVERVIEW

The HES-H3 series is an all-in-one hybrid inverter which integrates solar energy storage and grid power storage with sine wave AC output. Thanks to DSP control and an advanced control algorithm, the HES-H3 series has a high response speed, high reliability and meets top industry standards.

FEATURES

- **EFFICIENT** – Advanced MPPT technology with up to 99.9% efficiency; up to 1000V PV input voltage, ideal for high power
- **WATERPROOF PROTECTION** – Outputs high quality pure sine wave AC power; IP65 environmental protection for outdoor installation
- **USER FRIENDLY** – Industrial design with a modern aesthetic look; wall-mounted installation saves space
- **SAFETY** – 360 degrees of security from hardware to software; on-grid certification available
- **ALL-IN-ONE** – the 380V three phase system is efficient, reliable and ideal for large equipment, providing energy and cost savings
- **INTELLIGENT** – Exclusive Li-ion battery BMS dual activation; scheduling function to save costs with peak demand charges

APPLICATIONS

- Emergency power supply.
- Home backup storage.
- Data storage/UPS backup systems.
- Off-grid power storage.
- Solar power storage.

Product Description

PART#	DESCRIPTION	OUTPUT VOLTAGE	MAX PV INPUT VOLTAGE	POWER OUTPUT	OUTPUT CURRENT
EV-HES80SH3	Three Phase Hybrid Inverter	380V-415V	500V+500V	8000W	11.5A
EV-HES100SH3	Three Phase Hybrid Inverter	380V-415V	500V+500V	10000W	14.4A
EV-HES120SH3	Three Phase Hybrid Inverter	380V-415V	500V+500V	12000W	17.3A

Specifications

MODEL#	EV-HES80SH3	EV-HES100SH3	EV-HES120SH3
INVERTER OUTPUT			
Rated Output and UPS Power	8000W	10000W	12000W
Maximum Output Power	8800VA	11000VA	13200VA
Peak Power (Off Grid)	2 times rated power, 10 S		
Rated Grid Output Current	11.5A	14.4A	17.3A
Maximum Grid Output Current	12.7A	15.9A	19.1A
Power Factor	0.8		
Rated AC Frequency	50/60Hz		
AC Voltage Range	380~415V		
Total Harmonic Current	THD<3% (Linear load<1.5%)		
Output Mode	Off-grid (default) / On-grid / Hybrid		
BATTERY			
Battery Type	Lead-acid / Li-ion / User defined		
Voltage Range	126~600Vdc		
Maximum Charging Current	50A		
Maximum Discharging Current	50A		
PV INPUT			
Number of MPPT Trackers	2		
Number of Strings per MPPT Tracker	1+1		
Maximum DC Input Power	6000W+6000W	7500W+7500W	9000W+9000W
Maximum PV Input Voltage	500V+500V		
PV Input Current	15A+15A		
MPPT Voltage Range	180-850Vdc		
Min. PV Input Voltage/Startup Voltage	125V/180V		
GRID/GENERATOR INPUT			
Rated Input Frequency and Voltage	50/60Hz, 3L+N+PE, 220/230V, 230/400V, 240/415V		
Maximum DC Input Power	16000W	20000W	24000W
Max. Input Rated Apparent Grid Power	13200W	17600W	22000W
Maximum Grid Input Current	25.5A	31.9A	38.2A
EFFICIENCY			
MPPT Tracking Efficiency	99.9%		
Euro-eta	97.2%	97.5%	
Maximum Efficiency	97.9%	98.3%	
GENERAL			
Dimensions	620*550*230mm		
Weight	35kg		
Environmental Protection	IP65		
Operating Temperature Range	15°C-55°C		

MODEL#	EV-HES80SH3	EV-HES100SH3	EV-HES120SH3
Noise	<30dB		
Warranty	5 years		
COMMUNICATION			
Embedded Interfaces	RS485 / CAN		
External Modules (Optional)	WiFi/GPRS		
CERTIFICATION			
Safety	IEC62109-1, IEC62109-2, CEI-021, VDE4105, VDE0124		
EMC	EN61000-6-1, EN61000-6-3, FCC 15 Class B		

Typical System Configuration

