



Single-phase Hybrid Inverter Datasheet

HYS-8.0LV-EUG2
HYS-10.0LV-EUG2
HYS-12.0LV-EUG2



Description

The HYS-LV-EUG2 Series is a new generation single-phase hybrid inverter with excellent reliability, including power classes ranging from 8.0 kW to 12.0 kW.

The intelligent EMS function supports self-consumption mode, economic mode, and backup mode for multi-scenario applications.

Monitoring management through Hoymiles Cloud allows users to remotely diagnose and track system's performance over time, maximizing the total solar power production and battery utilization.

Features

- 01 Intelligent export limitation
- 02 Double MPPT tracker, up to 32 A MPPT current
- 03 Compatible with multiple batteries, providing users with more choices
- 04 Seamless backup power for whole home or critical loads

- 05 DC/AC ratio up to 130%
- 06 Ultralight for easy installation and space-saving
- 07 Built-in dry contact flexibly set to earth fault alarm, load control or generator control
- 08 Max. 10 parallel inverters

Technical Specifications

Model	HYS-8.0LV-EUG2		HYS-10.0LV-EUG2	HYS-12.0LV-EUG2
Battery				
Battery type	Li-ion/Lead-acid			
Battery voltage range (V)	40-60			
Max. charge/discharge current (A)	160/160	200/200	240/240	
Max. charge/discharge power (W)	8000/8000	10000/10000	12000/12000	
Charging strategy for Li-ion battery	Self-adaption to BMS			
Charging curve	3 Stages/Equalization			
External temperature sensor	Optional			
Communication	CAN, RS485			
PV Input				
Recommended max. PV power (W)	10400	13000	15600	
Max. input voltage (V)	550			
Rated voltage (V)	360			
Start-up voltage (V)	150			
MPPT voltage range (V)	125-500			
Max. input current (A)	32/32	32/32	32/32	
Max. short circuit current (A)	40/40	40/40	40/40	
MPPT number/Max. input strings number	2/4	2/4	2/4	
AC Input and Output (On-grid)				
Rated output power (W)	8000	10000	12000	
Max. output apparent power (VA)	8800	11000	13200	
Max. input power (W)	23000	23000	23000	
Grid form	L/N/PE			
Rated AC output voltage/Range (V)	220/230, 154-276			
Rated grid frequency (Hz)	50/60			
Max. output current (A)	38.3	47.8	57.4	
Max. input current (A)	100	100	100	
Power factor	>0.99 (0.8 leading ... 0.8 lagging)			
THDi (@rated output)	<3%			
AC Output (Off-grid)				
Rated output power (W)	8000	10000	12000	
Max. output apparent power (VA)	16000, 10s	20000, 10s	23000, 10s	
Back-up switch time (ms)	<10			
Grid form	L/N/PE			
Rated output voltage (V)	220/230			
Rated output frequency (Hz)	50/60			
Max. continuous output current (A)	34.8	43.5	52.2	
THDv (@linear load)	<3%			
Efficiency				
MPPT efficiency	99.9%	99.9%	99.9%	
Max. efficiency	97.6%	97.6%	97.6%	
EU efficiency	97.0%	97.0%	97.0%	
Max. battery discharge to AC efficiency	95.0%	95.0%	95.0%	
Protection				
Anti-islanding protection	Integrated			
PV string input reverse polarity protection	Integrated			
Insulation resistor detection	Integrated			
Residual current monitoring unit	Integrated			
AC over current protection	Integrated			
AC short current protection	Integrated			
AC overvoltage and undervoltage protection	Integrated			
PV arc fault detection	Optional			
Compliant MLRSD products	Optional			
Surge protection	DC Type II/AC Type III			
General				
Dimensions (W × H × D [mm])	502 × 740 × 202			
Weight (kg)	41			
Mounting	Wall Mounting			
Operating temperature (°C)	-25 to +65 (>45, derating)			
Relative humidity	0-95%, no condensing			
Cooling	Smart Cooling			
Topology (Solar/Battery)	0-95%, no condensing			
Altitude (m)	≤2000			
Protection degree	IP65			
Noise (dB)	<40			
User interface	LED & APP			
Digital input/output	1 × DI, 2 × DO			
Communication	RS485, Optional: Wi-Fi/WLAN/GPRS			
Certifications and Standards				
Grid connection standard	EN 50549, NRS 097-2-1			
Safety/EMC standard	IEC 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4			