



## Single-phase Hybrid Inverter

**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, economical 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 Remote monitoring through S-Miles Cloud

# Technical Specifications

Model	HYS-8.0LV-EUG2		HYS-10.0LV-EUG2		HYS-12.0LV-EUG2	
Battery						
Battery type	Li-ion/Lead-acid <sup>(1)</sup>					
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					
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					
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)	Transformerless/High-frequency isolation					
Altitude (m)	≤2000					
Protection degree	IP65					
Noise (dB)	<40					
User interface	LED & APP					
Digital input/output	1 × DI, 2 × DO					
Max. parallel	10					
Communication	RS485, optional: Wi-Fi/Ethernet/4G <sup>(2)</sup>					
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					

(1) Lead-acid batteries will be supported soon.

(2) The DTS-Ethernet and DTS-4G solutions will be coming soon.