



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	
Nominal Battery Voltage (V)		48	
Voltage Range (V)		40-60	
Max. Charge Current (A)	160	200	240
Max. Discharge Current (A)	160	200	240
Charging Strategy for Li-ion Battery		Self-adaption to BMS	
Charging Curve		3 Stages / Equalization	
External Temperature Sensor		Optional	
PV Input			
Max. PV Input Power (W)	10400	13000	15600
Max. PV Input Voltage (V)		550	
Nominal Input Voltage (V)		360	
MPPT Voltage Range (V)		125-500	
Start-up Voltage (V)		150	
Number of MPPTs	2	2	2
Max. Number of PV String per MPPT	2/2	2/2	2/2
Max. PV Input Current (A)	32/32	32/32	32/32
Short-circuit Current of PV Input (A)	40/40	40/40	40/40
AC Input and Output (On-grid)			
Nominal Output Apparent Power (VA)	8000	10000	12000
Max. Output Apparent Power (VA)	8800	11000	13200
Max. Input Apparent Power (VA)	23000	23000	23000
Nominal AC Voltage (V)		220/230	
Nominal Grid Frequency (Hz)		50/60	
Nominal Output Current (A)		43.5	52.2
Max. Output Current (A)	38.3	47.8	57.4
Max. Input Current (A)	100	100	100
Power Factor		0.8 leading ... 0.8 lagging	
Total Harmonic Distortion (@nominal output)		<3%	
AC Output (Off-grid)			
Max. Output Apparent Power (VA)	8000	10000	12000
Peak Output Apparent Power (VA)	16000, 10s	20000, 10s	23000, 10s
Nominal AC Voltage (V)		220/230	
Nominal AC Frequency (Hz)		50/60	
Max. Continuous Output Current (A)	34.8	43.5	52.2
Total Harmonic Distortion (@ linear load)		<3%	
Efficiency			
Max. Efficiency	97.6%	97.6%	97.6%
Euro Efficiency	97.0%	97.0%	97.0%
Max. Battery to Load Efficiency	95.0%	95.0%	95.0%
MPPT Efficiency	99.9%	99.9%	99.9%
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	
Overvoltage Category		DC Type II / AC Type III	
General			
Dimension (W × H × D [mm])		502 × 740 × 202	
Weight (kg)		41	
Mounting		Wall Mounting	
Operation Temperature (°C)		-25 to +65 (>45, derating)	
Relative Humidity		0-95%, no condensing	
Altitude (m)		≤2000	
Cooling		Smart Cooling	
Protection Degree		IP65	
Noise (dB [A])		<40	
User Interface		LED & APP	
Communication with BMS		RS485, CAN	
Communication with Meter		RS485	
Communication Interface		RS485, Wi-Fi / WLAN / GPRS (optional)	
Digital Input / Output		1 × DI, 2 × DO	
Isolation Method (Solar / Battery)		Transformerless / High-frequency Isolation	
Certifications and Standards			
Grid Regulation		NRS 097-2-1, EN 50549, VDE-AR-N 4105, AS/NZS 4777.2	
Safety Regulation		IEC 62109-1, IEC 62109-2	
EMC		IEC/EN 61000-6-1/2/3/4	