

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

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Technical Specifications

Model	HYS-8.0LV-EUG2	HYS-10.0LV-EUG2	HYS-12.0LV-EUG2
Battery			
Battery type		Li-ion/Lead-acid(1)	
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(2)	
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.

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