

H12000S

8-12kW Single-phase Hybrid Inverter

8kW/10kW/12kW

- Three MPPT, 150% oversized PV input, up to 18,000W
- Lightweight and compact design, easy to install
- External pull-out smart fan design, reducing post-sales maintenance costs and extending product lifecycle
- 240A ultra-large battery charge/discharge current, faster charging speed, and stronger load capacity
- Maximum efficiency of 97.8%, delivering higher economic benefits
- Six units support off-grid parallel operation, achieving a maximum power output of 72kW
- Generator compatibility with dry contact control for automatic diesel engine start/stop and intelligent load management
- 4.3-inch large LCD screen combined with APP remote monitoring for convenient and efficient system management



Technical Specification

Model	H8000S	H10000S	H12000S
PV Input Specification			
Recommended max. PV input power(Wp)	18000	18000	18000
Max. PV input voltage(V)	500		
Startup input voltage(V)	100		
Rated PV input voltage(V)	370		
MPPT voltage range(V)	100-425		
No. of independent MPPT inputs	3		
No. of PV strings per MPPT	2+1+1		
Max. PV input current(A)	28/16/16		
Max. DC short-circuit current(A)	44/25/25		
Battery Specificationdata			
Battery voltage range(V)	40-60		
Rated Battery Voltage (Vdc)(V)	48		
Max. charge / discharge current(A)	240/240	240/240	240/240
Max. charge / discharge power(W)	12000	12000	12000
Battery Expansion	2~3 in parallel-connected 5kWh / 1~2 in parallel-connected 10kWh Low-voltage battery modules		
Grid Port Specification			
Max. AC power from grid(W)	18000	18000	18000
Max.AC input current from grid(A)	78.2	78.2	78.2
Rated AC output power(W)	8000	10000	13200
Max. AC output apparent power(VA)	8800	11000	13200
Max. AC output current(A)	38.3	47.8	57.4
Rated AC voltage	L/N/PE,220V/230V		
AC voltage range(V)	185- 265		
Rated grid frequency(HZ)	50		
Grid frequency range(HZ)	48-51.5		
Harmonic (THD)	<3 %(at rated power)		
Power factor at rated power / Adjustable power factor	0.8 leading - 0.8 lagging		

*Different generators have different conversion times.

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GEN Port Specification			
Max. AC power from GEN(W)	12000	12000	12000
Rated AC input power(W)	12000	12000	12000
Max.AC input current from GEN(A)	52.2	52.2	52.2
Max. AC input apparent power(VA)	13200	13200	13200
Max. AC output current(A)	57.4	57.4	57.4
Rated AC voltage	L/N/PE,220V/230V		
AC voltage range(V)	185V–265		
Rated GEN frequency(HZ)	50		
Backup Port Specification			
Rated voltage	L / N / PE, 220 V / 230 V		
Rated grid frequency(HZ)	50		
Output voltage harmonic (THD)	<3 %		
Switch time to emergency mode	≤10 ms		
Rated output power(W)	12000	12000	12000
Peak output power(W)	13200	13200	13200
Efficiency			
Max. efficiency / European efficiency	97.8%/96.5%		
Protection & Function			
Grid monitoring	Yes		
DC reverse polarity protection	Yes		
AC short - circuit protection	Yes		
Leakage current protection	Yes		
DC switch (solar)	Yes		
Surge protection	DC type II / AC type III		
Battery input reverse polarity protection	Yes		
IV scan aand diagnosis	Yes		
General data			
Topology (solar / battery)	Transformerless		
Degree of protection	IP65		

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Model	H8000S	H10000S	H12000S
Dimensions (W * H * D)(mm)	459*650*267		
Weight(KG)	46		
Installation type	Wall-mounting bracket		
Cooling method	Fan cooling		
Noise(MAX)	< 50 dB		
Ambient temperature(℃)	-20~+60		
Relative humidity (Non-condensing)	15% - 95%		
Max. operating altitude	3000		
DI / DO	DI * 1 / DO * 2 / DRM		
DC connection type	MC4 (PV) / Plug and play connector (battery)		
AC connection type	Plug and play connector		
Display	LCD+APP		
Monitor	RS485, WLAN, Ethernet, CAN		
Warranty	5 Year Product Warranty(optional 10 year)		
Certification & Standard			
Certification	CB, CE, UKCA, SONCAP, RCM, ROHS		
Standard	NRS 097-2-1:2024 Edition 3 EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021 EN 61000-3-12:2011, EN IEC 61000-3-11:2019EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021 EN 61000-3-12:2011, EN IEC 61000-3-11:2019		

AC voltage range*: Voltage ranges vary according to national regulations.
Warranty* : Refer to the product warranty terms for details.