



SINGLE-PHASE HYBRID INVERTER

The HIS-8L-G3S series delivers powerful and reliable single-phase hybrid performance with up to 8,000 W output.

Its intelligent EMS supports multiple operating modes, including self-consumption, economy, backup, peak shaving, and time-of-use (TOU), enabling flexible energy control across different usage scenarios.

Paired with S-Miles Cloud, the system offers remote monitoring, smart diagnostics, and long-term performance insights—helping you get the most from the solar energy and battery storage.

HIS-8L-G3S



Features

- 01 Ultra-thin and lightweight design for easy installation and space-saving deployment
- 02 Integrated LCD touchscreen for intuitive monitoring and system operation
- 03 UPS-level performance with 0 ms switching time for uninterrupted power supply
- 04 Support multiple intelligent operating modes, including Peak Shaving and up to eight configurable 24-hour TOU schedules
- 05 Integrated AI energy management with generator, heat pump, and smart load
- 06 Supports parallel operation of up to 10 inverters for scalable on-grid and off-grid systems

Technical Specifications

Model	HIS-8L-G3S
Battery	
Battery type	Li-ion/Lead-acid
Battery voltage range (V)	40-60
Max. charging/discharging current (A)	140/140
Max. charging/discharging power (W)	8000/8400*
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)	16000
Max. input voltage (V)	550
Rated voltage (V)	360
Start-up voltage (V)	100
MPPT voltage range (V)	90-500
Max. input current (A)	18/18
Max. short circuit current (A)	27/27
MPPT number/Max. input strings number	2/2
AC Input and Output (On-grid)	
Rated output power (W)	8000
Max. output apparent power (VA)	8000
Max. continuous AC bypass current (A)	50
Grid form	L/N/PE
Rated AC output voltage/Range (V)	220/154-264, 230/161-276, 240/168-288
Rated grid frequency (Hz)	50/60
Max. output current (A)	36.4
Power factor	>0.99 (0.8 leading ... 0.8 lagging)
AC Output (Backup)	
Rated output power (W)	8000
Max. output apparent power (VA)	16000, 10s
Back-up switch time (ms)	0
Grid form	L/N/PE
Rated output voltage (V)	220/230/240
Rated output frequency (Hz)	50/60
Max. continuous output current (A)	36.4
THDv (@linear load)	<3%
Efficiency	
MPPT efficiency	99.90%
Max. efficiency	97.70%
EU efficiency	97.00%
Max. battery discharge to AC efficiency	95.00%
Protection	
Anti-islanding protection	Integrated
PV string input reverse polarity protection	Integrated
Insulation resistor detection	Integrated
Residual current monitoring unit	Integrated
AC overcurrent protection	Integrated
AC short circuit protection	Integrated
AC overvoltage and undervoltage protection	Integrated
Surge protection	DC Type II/AC Type II
General	
Dimensions (W × H × D [mm])	506 × 495 × 120
Weight (kg)	20
Mounting	Wall-mounted
Operating temperature (°C)	-25 to +65 (>45, derating)
Relative humidity	0-95%, no condensation
Cooling	Smart fan
Topology (Solar / Battery)	Transformerless/High-frequency isolation
Altitude (m)	≤4000
Protection degree	IP66
Noise (dB)	<55
User interface	LED, App
Digital input/output	DRM, 2 × DI, 2 × DO
Communication	RS485, Wi-Fi/Ethernet (optional)
Certifications and Standards	
Grid connection standard	G98, G99, G100, EN 50549-1/-10, NF EN 50549-1/-10, CEI 0-21, PEA, MEA, IEC 62116, IEC 61727, IEC 60068, IEC 61683, DEWA
Safety/EMC standard	IEC 62109-1/-2, EN 61000-6-1/-2/-3/-4

* This value applies only when used with the LB-6D-G3 or LB-10D-G3 battery.