

SINGLE-PHASE HYBRID INVERTER

The HIS-(3-6)L-G3 series is a high-performance single-phase hybrid inverter with excellent reliability, including power classes ranging from 3 kW to 6 kW.

The intelligent EMS function supports self-consumption mode, economy mode, backup mode, peak shaving mode, and time of use mode for multi-scenario applications.

Monitoring management through S-Miles Cloud allows users to remotely diagnose and track system performance over time, maximizing the total solar power production and battery utilization.

HIS-(3-6)L-G3



Features

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| 01 Easy installation and space-saving with ultrathin and ultralight design | 04 Support multiple intelligent operating modes, including Peak Shaving and up to eight configurable 24-hour TOU schedules |
| 02 Double MPPT tracker, up to 18 A MPPT current | 05 Integrated AI energy management with generator, heat pump, and smart load |
| 03 UPS-level 0 ms switching time | 06 Max. 10 inverters in parallel for on-grid and off-grid system extension |

Technical Specifications

Model	HIS-3L-G3	HIS-3.6L-G3	HIS-4.6L-G3	HIS-5L-G3	HIS-6L-G3
Battery					
Battery type	Li-ion/Lead-acid				
Battery voltage range (V)	40-60				
Max. charging/discharging current (A)	75/75	90/90	115/115	120/120	135/135
Max. charging/discharging power (W)	3000/3150	3600/3800	4600/4850	5000/5250	6000/6300
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)	6000	7200	9200	10000	12000
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)	3000	3680 ⁽¹⁾	4600 ⁽²⁾	5000	6000
Max. output apparent power (VA)	3300	3680 ⁽¹⁾	4600 ⁽²⁾	5500	6600
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)	15	16 ⁽¹⁾	20 ⁽²⁾	25	30
Power factor	>0.99 (0.8 leading-0.8 lagging)				
AC Output (Backup)					
Rated output power (W)	3000	3680	4600	5000	6000
Max. output apparent power (VA)	6000, 10s	7360, 10s	9200, 10s	10000, 10s	12000, 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)	13.6	16	20	22.7	27.3
THDv (@linear load)	<3%				
Efficiency					
MPPT efficiency	99.9%				
Max. efficiency	97.7%				
EU efficiency	97.0%				
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 × 99				
Weight (kg)	17				
Mounting	Wall-mounted				
Operating temperature (°C)	-25 to +65 (>45, derating)				
Relative humidity	0-95%, no condensation				
Cooling	Natural convection				
Topology (Solar / Battery)	Transformerless/High-frequency isolation				
Altitude (m)	≤4000				
Protection degree	IP66				
User interface	LED, App				
Digital input/output	DRM, 2 × DI, 2 × DO				
Communication	RS485, Wi-Fi/Ethernet/4G (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				

(1) This value compliance with G98.

(2) This value compliance with VDE 4105.