Open Energy for All

SINGLE-PHASE HYBRID INVERTER

HIS-(3-8)L-G3S



Features

01 Easy installation and space-saving with ultrathin and ultralight design

02 Double MPPT tracker, up to 18 A MPPT current

03 UPS-level 0 ms switching time

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 Max. 10 inverters in parallel for on-grid and off-grid system extension

Technical Specifications

Model	HIS-3L-G3S	HIS-3.6L-G3S	HIS-4.6L-G3S	HIS-5L-G3S	HIS-6L-G3S	HIS-8L-G3S
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	140/140
Max. charging/discharging power (W)	3000/3150	3600/3800	4600/4850	5000/5250	6000/6300	8000/8300[1]
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	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)	3000	3680	4600	5000	6000	8000
Max. output apparent power (VA)	3300	3680	4600	5500	6600	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)	15	16.7	20.9	25	30	36.4
Power factor	>0.99 (0.8 leading ... 0.8 lagging)					
AC Output (Backup)						
Rated output power (W)	3000	3680	4600	5000	6000	8000
Max. output apparent power (VA)	6000, 10s	7360, 10s	9200, 10s	10000, 10s	12000, 10s	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)	13.6	16.7	20.9	22.7	27.3	36.4
THDv (@linear load)	<3%					
Efficiency						
MPPT efficiency	99.90%					
Max. efficiency	97.70%					97.50%
EU efficiency	97.00%					
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 × 99					506 × 495 × 120
Weight (kg)	17					20
Mounting	Wall-mounted					
Operating temperature (°C)	-25 to +65 (>45, derating)					
Relative humidity	0-95%, no condensation					
Cooling	Natural convection					Smart fan
Topology (Solar / Battery)	Transformerless/High-frequency isolation					
Altitude (m)	≤4000					
Protection degree	IP66					
Noise (dB)	<35					<55
User interface	LCD, App					
Digital input/output	DRM, 2 × DI, 2 × DO					
Communication	RS485, Wi-Fi/Ethernet/4G (optional)					
Certifications and Standards						
Grid connection standard[2]	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[2]	IEC 62109-1/-2, EN 61000-6-1/-2/-3/-4					

(1) This value applies only when used with the LB-6D-G3 or LB-10D-G3 battery inverter.

(2) Certifications and standards for the HIS-8L-G3S are currently pending.

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