



# Single-phase Hybrid Inverter

**HIS-6L-G3S**

## Description

The HIS-6L-G3S is a high-performance single-phase hybrid inverter with excellent reliability.

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.

## 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 switching time <4 ms

04

Support multiple intelligent working modes, including Peak Shaving and 8×24h Time of Use

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-6L-G3S
<b>Battery</b>	
Battery type	Li-ion/Lead-acid
Battery voltage range (V)	40-60
Max. charging/discharging current (A)	135/135
Max. charging/discharging power (W)	6000/6300
Charging strategy for Li-ion battery	Self-adaption to BMS
Charging curve	3 Stages/Equalization
External temperature sensor	Optional
Communication	CAN
<b>PV Input</b>	
Recommended max. PV power (W)	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
<b>AC Input and Output (On-grid)</b>	
Rated output power (W)	6000
Max. output apparent power (VA)	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)	30
Power factor	>0.99 (0.8 leading ... 0.8 lagging)
<b>AC Output (Backup)</b>	
Rated output power (W)	6000
Max. output apparent power (VA)	12000, 10s
Back-up switch time (ms)	<4
Grid form	L/N/PE
Rated output voltage (V)	220/230/240
Rated output frequency (Hz)	50/60
Max. continuous output current (A)	27.3
THDv (@linear load)	<3%
<b>Efficiency</b>	
MPPT efficiency	99.9%
Max. efficiency	97.7%
EU efficiency	97.0%
<b>Protection</b>	
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
<b>General</b>	
Dimensions (W x H x D [mm])	506 x 495 x 99
Weight (kg)	<17
Mounting	Wall mounting
Operating temperature (°C)	-25 to +65 (>45, derating)
Relative humidity	0-95%, no condensing
Cooling	Natural convection
Topology (Solar/Battery)	Transformerless/High-frequency isolation
Altitude (m)	≤4000
Protection degree	IP66
Noise (dB)	<35
User interface	LED, App
Digital input/output	DRM, 2 x DI, 2 x DO
Communication	RS485, Wi-Fi/Ethernet (optional)
<b>Certifications and Standards</b>	
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

