



H1 Series
Single Phase Hybrid Inverter
(HV) (8/10) kW

Smarter Power Better Life

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Type Designation	SiH-8kW-SH		SiH-10kW-SH	
PV (input)				
Max. recommended PV array power [Wp]	16000		20000	
Max. PV input voltage [V]			600	
Min. operating PV voltage [V]			40	
Start-up input voltage [V]			50	
Rated PV input voltage [V]			360	
MPPT voltage range [V]			40-560	
No. of MPPT/Strings per MPPT			4 (1/1/1/1)	
Max. PV input current [A]			64 (16/16/16/16)	
Max. DC short-circuit current [A]			80 (20/20/20/20)	
Max. current for each input connector [A]			20	
Battery (input/output)				
Battery type			Li-ion battery	
Battery voltage range [V]			80-460	
Max. charge/discharge current [A]			50/50	
Max. charge/discharge power [W]			10000/10000	
Backup Output (On-Grid Mode)				
Rated output power [W]			14500	
Rated output current [A]			63	
Backup Output (Off-Grid Mode)				
Rated output power	8000 W/8000 VA		9999 W/9999 VA	
Peak output power			13680 VA, 10s	
Backup switching time [ms]			<10	
Rated voltage [V]			220/230/240 (±2 %)	
Rated current [A]	36.4		45.5	
Power factor			0.8 leading to 0.8 lagging (>0.99 @ Resistive load)	
Frequency range [Hz]			50/60 (±2 %)	
Total harmonic distortion (THDv, rated power, linear load) [%]			≤2	
Grid (input/output)				
Max. AC input power from grid [VA]			14500	
Rated AC output power [W]	8000		9999	
Max. AC output power [VA]	8000		9999	
Max. AC output current [A]	36.4		45.5	
Rated AC voltage [V]			220/230/240	
AC voltage range [V]			154-276	
Rated grid frequency [Hz]			50/60 (50 for Australia)	
Grid frequency range [Hz]			45-55/55-65	
Total harmonic distortion (THDi) [%]			<3	
Power factor at rated power			>0.99	
Adjustable power factor			adj.0.8.leading to 0.8 lagging	
Efficiency				
Max. efficiency/European efficiency [%]	97.40/96.80		97.50/97.10	
Protection & Function				
Surge protection			DC type II / AC type II	
Gird monitoring			Yes	
DC reverse polarity protection			Yes	
Battery input reverse polarity protection			Yes	
AC short-circuit protection			Yes	
Leakage current protection			Yes	
DC switch (PV)			Yes	
General Data				
Topology (PV/Battery)			Non-isolated	
Degree of protection			IP65	
Dimensions (W*H*D) [mm]			599*490*177	
Weight [kg]			≤29	
Mounting method			Wall-mounting bracket	
Operating ambient temperature range [°C]			-25-60	
Allowable relative humidity range [%]			0-100	
Cooling method			Natural convection	
Max. operating altitude [m]			4000	
Display			LED	
Communication			RS485/CAN/WLAN	
DI/DO			1*DI / 2*DO/ DRM	
DC connection type			MC4	
Battery connection type			MC4	
AC connection type			Screws & Fasteners	
Overvoltage category			AC III, DC II	
Protective class			Class I	
Active Abti-isianding method			Frequency Shift	
Country of manufacture			China	