



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

FROM GRID TO HOME



KEY FEATURES



50v

Low starting voltage

200%

Max. DC input oversizing

4MPPT

Max. 16A DC input

10kw

Max. charge/discharge power

14.5kw

Rated output power

4000m

Max. operating altitude



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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		LiFePO4 Prismatic Cell
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 %)
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
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
Grid 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
DC fuse (Battery)		Yes
General Data		
Topology (PV/Battery)		Transformerless
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

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

** Depending on the connected battery

*** Can be reached only if PV and battery power is sufficient

About Us

Full Range From Power Generation,
Transmission, Distribution To

Energy Storage

33 years

With 33 years of experience,
specialized in equipment manufacturing
and engineering services

22

22 Manufacturing bases

Public Co.

Founded in 1993
Stock listed in 2004 (SZSE002028)

100+

With 10,000+ employees
in 100+ countries and regions

US\$5.0 Billion

2025 Turnover

1,000kV

Full range product: 10kV -1,000kV

1400+

1411 Qualified engineers are
the driving force behind the
exceptional R&D progress

esGrid

Grid-level energy storage

Sieyuan Utility Scale BESS

TOP 3

Sieyuan 思源电气
Electrical Equip. Manufacturer

 **swatten**
Powered by Sieyuan

C&I and Residential BESS





Global Marketing & Service Layout



Our Global Clients





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Swatten APAC Case



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