



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



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

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

FROM GRID TO HOME

Full Range From Power Generation, Transmission, Distribution To

Energy Storage

33 years

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

Public Co.

Founded in 1993
Stock listed in 2004 (SZSE002028)

US\$5.0 Billion

2025 Turnover

TOP 3

Sieyuan 思源电气
Electrical Equip. Manufacturer

1,000kV

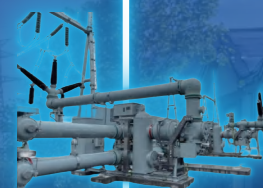
Full range product: 10kV -1,000kV

100+

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

22

22 Manufacturing bases



C&I and Residential BESS

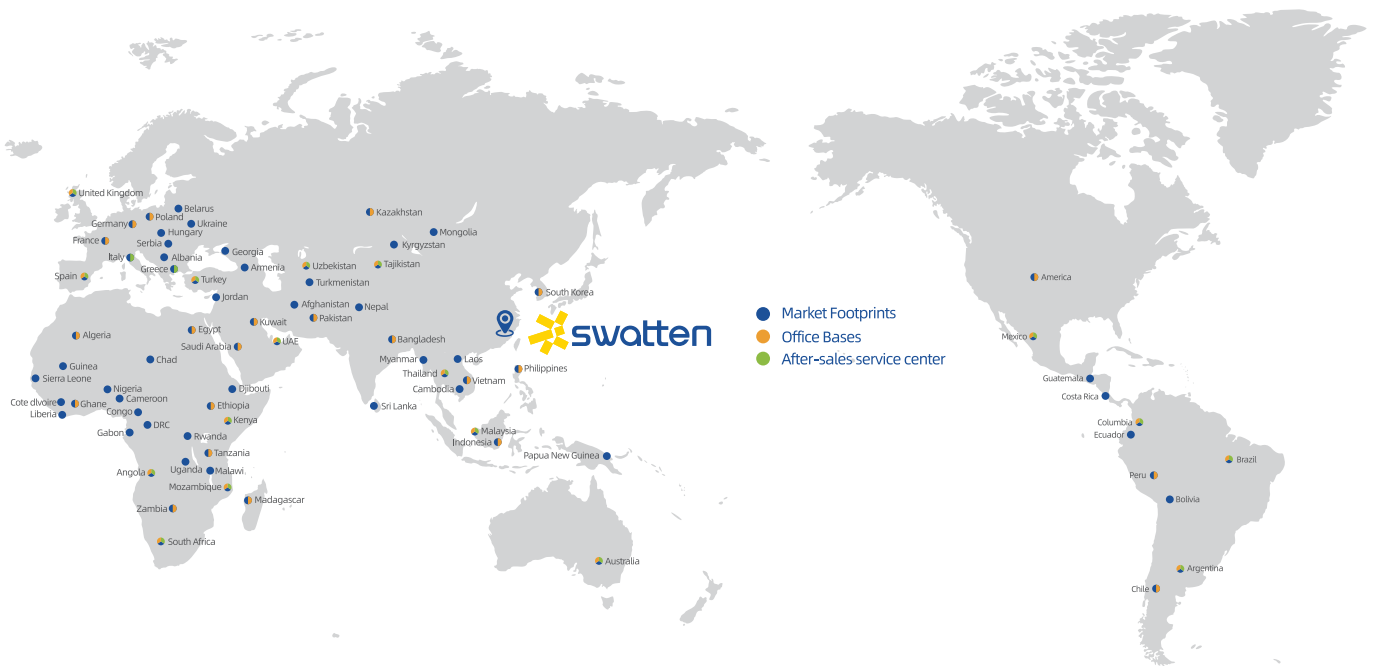


esGrid

Grid-level energy storage

Sieyuan Utility Scale BESS







Swatten's Global Cases



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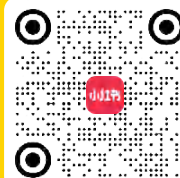
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