



Single Phase Hybrid Inverter (HV) (3-6) kW

FROM GRID TO HOME



KEY FEATURES



50v

Low starting voltage

330%

Max. DC input oversizing

16A

Max. DC input

6.6kw

Max. power of charging and supply

<10ms

Off-grid switching

4000m

Max. operating altitude



Single Phase Hybrid Inverter (HV) (3-6) kW

Type Designation	SiH-3kW-SH	SiH-3.6kW-SH	SiH-4kW-SH	SiH-5kW-SH	SiH-6kW-SH
PV (input)					
Max. recommended PV array power [Wp]	10000	10700	11000	12000	13000
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			2 (1/1)		
Max. PV input current [A]			32 (16/16)		
Max. DC short-circuit current [A]			40 (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]	30/30				
Max. charge/discharge power [W]	6600/6600				
Backup Output (On-Grid Mode)					
Rated output power [W]	6000				
Rated output current [A]	27				
Backup Output (Off-Grid Mode)					
Rated output power	3000 W/3000 VA	3680 W/3680 VA	4000 W/4000 VA	5000 W/5000 VA	6000 W/6000 VA
Peak output power***	8400 VA, 10s				
Backup switching time [ms]	<10				
Rated voltage [V]	220/230/240 (±2 %)				
Frequency range [Hz]	50/60 (±0.5 %)				
Total harmonic distortion (THDv, rated power, linear load) [%]	≤2				
Grid (input/output)					
Max. AC input power from grid [VA]	10000	10700	11000	12000	13000
Rated AC output power [W]	3000	3680	4000	5000	6000
Max. AC output power [VA]	3000	3680	4000	5000	6000
Rated AC output current (at 230V) [A]	13.1	16	17.4	21.8	26.1
Max. AC output current [A]	13.7	16	18.2	22.8	27.3
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, rated power) [%]	<3				
Power factor at rated power	>0.99				
Adjustable power factor	adj.0.8.leading to 0.8 lagging				
Efficiency					
Max. efficiency/European efficiency [%]	97.30/97.00	97.50/97.00		97.70/97.30	
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]	495*345*180				
Weight [kg]	≤20				
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/1*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

1400+

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

100+

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

22

22 Manufacturing bases

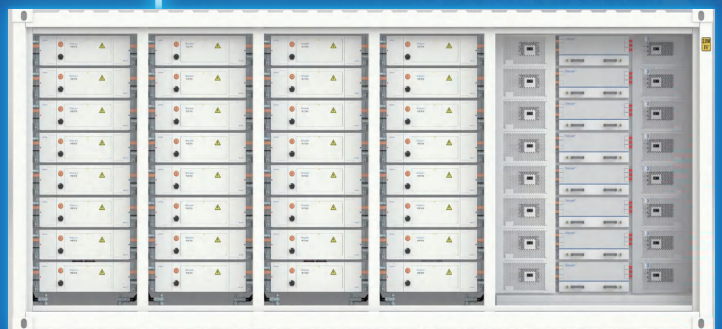


swatten
 Powered by Sieyuan

C&I and Residential BESS

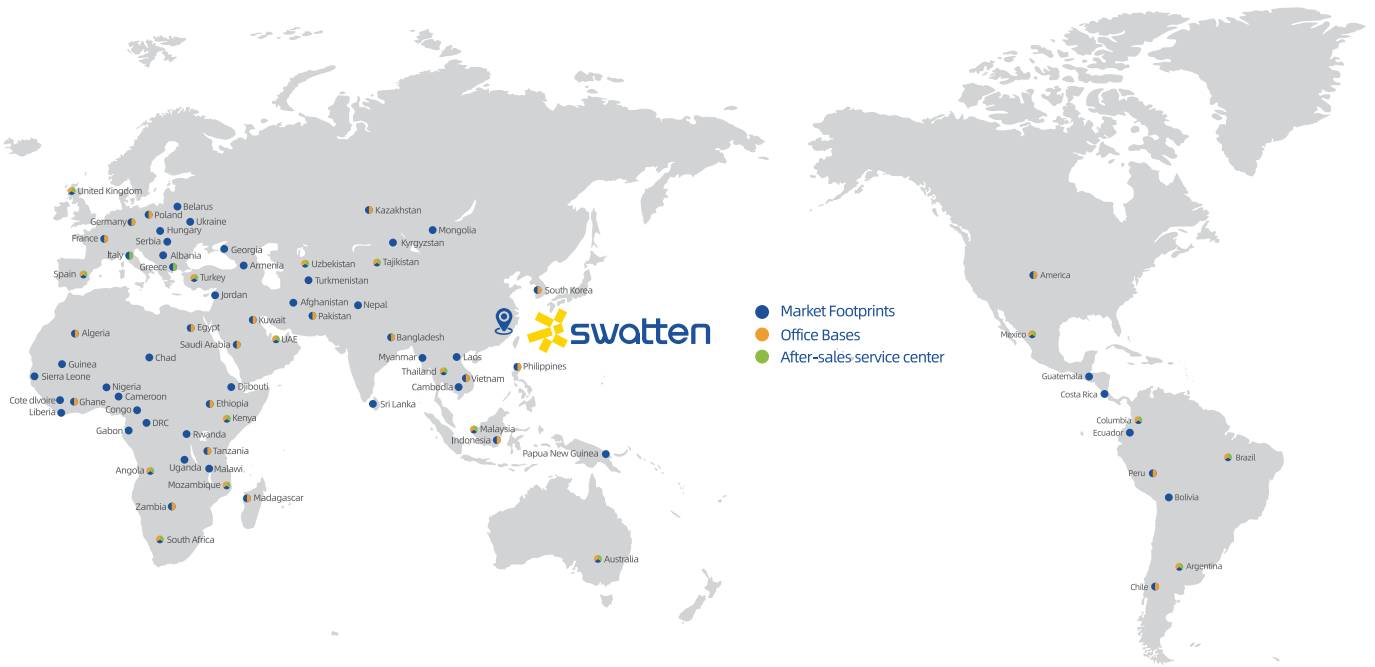
esGrid
 Grid-level energy storage

Sieyuan Utility Scale BESS





Global Marketing & Service Layout



Our Global Clients





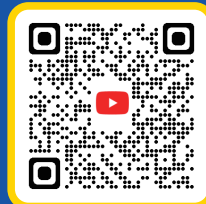
Swatten's Global Cases



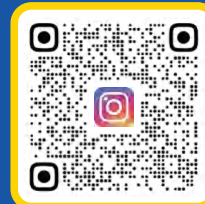
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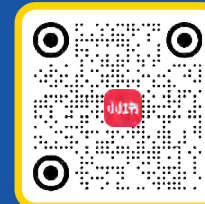
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