



All-In-One (HV) (5-20) kW

FROM GRID TO HOME



ALL-IN-ONE 5-20kW

Compared With Separate Installation



All-in-one after-sales service

- 10-year warranty. Replace new machines instead of repairing.*
- No need to worry about after-sales between inverters and batteries of different brands.

* For critical parts quality issues.

Saves **20%** space

- Integrated humanized design, removed redundant cables.
- Adds points to beauty and attractiveness.



20% reduction in installation time

- Stack installation with Plug & Play connection.
- Makes the installation process time-saving, cost-effective and worry-free.



Integrated AC Charger, Plug & Play

- Charging electric vehicles with clean energy, effectively save charging costs.



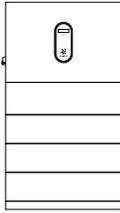
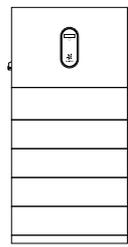
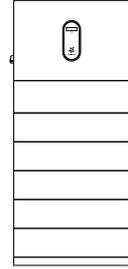
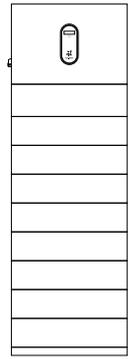
All-in-one System Single Phase (HV) (5-10) kW

Type Designation	All-in-one sys-5kW-SH	All-in-one sys-6kW-SH	All-in-one sys-8kW-SH	All-in-one sys-10kW-SH
PV (input)				
Max. recommended PV array power [Wp]	12000	13000	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	2 (1/1)			4 (1/1/1/1)
Max. PV input current [A]	32 (16/16)			64 (16/16/16/16)
Max. DC short-circuit current [A]	40 (20/20)			80 (20/20/20/20)
Max. current for each input connector [A]			20	
Battery				
Battery type	LiFePO4 Prismatic Cell			
Max. charge/discharge current [A]	30/30			
Battery voltage range [V]	80-460			
Nominal capacity range	9.6 kWh-22.4 kWh (3.2 kWh/50 Ah per module)			
Number of connectable modules	Max. 7 modules for each stack, Max. 4 stacks in parallel (89.6kWh)			
Backup Output (On-Grid Mode)				
Rated output power [W]	6000		14500	
Rated output current [A]	27		63	
Backup Output (Off-Grid Mode)				
Rated output power	5000 W / 5000 VA	6000 W / 6000 VA	8000 W/8000 VA	9999 W/9999 VA
Peak output power**	8400 VA, 10s		13680 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]	12000	13000	14500	
Rated AC output power [W]	5000	6000	8000	9999
Max. AC output power [VA]	5000	6000	8000	9999
Rated AC output current (at 230V) [A]	21.8	26.1	36.4	45.5
Max. AC output current [A]	22.8	27.3	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, rated power) [%]	<3			
Power factor at rated power	> 0.99			
Adjustable power factor	adjustable 0.8.leading to 0.8 lagging			
Efficiency				
Max. efficiency/European efficiency [%]	97.70/97.30		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			
Mounting method	Floor-standing			
Operating ambient temperature range [°C]	-25-60			
Storage temperature [°C]	-20-45 (≤1 Month)/-20-25 (≤6 Months)			
Allowable relative humidity range [%]	5-95			
Cooling method	Natural convection			
Max. operating altitude [m]	2000			
Display	LED			
Communication	RS485/CAN/WLAN			
DI/DO	1*DI/1*DO/DRM			1*DI/2*DO/DRM
DC connection type	MC4			
Battery connection type	MC4			
AC connection type	Plug and play connector			

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

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

All-in-one System Batteries (HV) (9.6-25.6) kWh

Type Designation	3 modules	4 modules	5 modules	6 modules	7 modules	8 modules**
Technical data						
Usable energy* [kWh]	9.60	12.80	16.00	19.20	22.40	25.60
Depth of discharge	Max.100% DOD (settable)					
Module parameter	64V 50Ah 640*172*360mm 33.3±0.5kg					
Cell type	LiFePO4 Prismatic Cell					
System configuration	3 	4 	5 	6 	7 	8** 
Cell configuration	1P60S	1P80S	1P100S	1P120S	1P140S	1P160S
Nominal voltage [V]	192	256	320	384	448	512
Operating voltage range [V]	171-216	228-288	285-360	342-432	399-504	456-576
Max. continuous current*** [A]	30					
Max. continuous power*** [kW]	5.76	7.68	9.60	11.52	13.44	15.36
Short circuit current [A]	40					
Communication	CAN / RS485					
Weight**** [kg]	152	185	218	251	284	317
Dimensions (W*H*D)****[mm]	640*1012*360	640*1172*360	640*1332*360	640*1492*360	640*1652*360	640*1812*360
Operating temperature [°C]	Charge: 0-50 / Discharge: -20-50					
Storage temperature [°C]	-20-45 (≤1Month) / -20-25 (≤6 Months)					
Humidity [%]	5-95					
Altitude [m]	≤2000					
Degree of protection	IP65 (Indoor / Outdoor)					
Cooling	Natural convection					
Installation location	Floor-standing					
Display	SOC indicator, Status indicator					
Warranty	10 Years					

* Test conditions: 3.0V-3.5V, 0.2C Charge (CC-CV) and discharge at 25±3°C, 100% depth of discharge (DOD);

** Single Phase All-in-one system are not applicable to this configuration.

*** Max. Continuous Current/Power derating will occur related to temperature / SOC / Humidity;

**** Measured based on the Three Phase All-in-one system. Only slight differences in height&weight between different models.

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

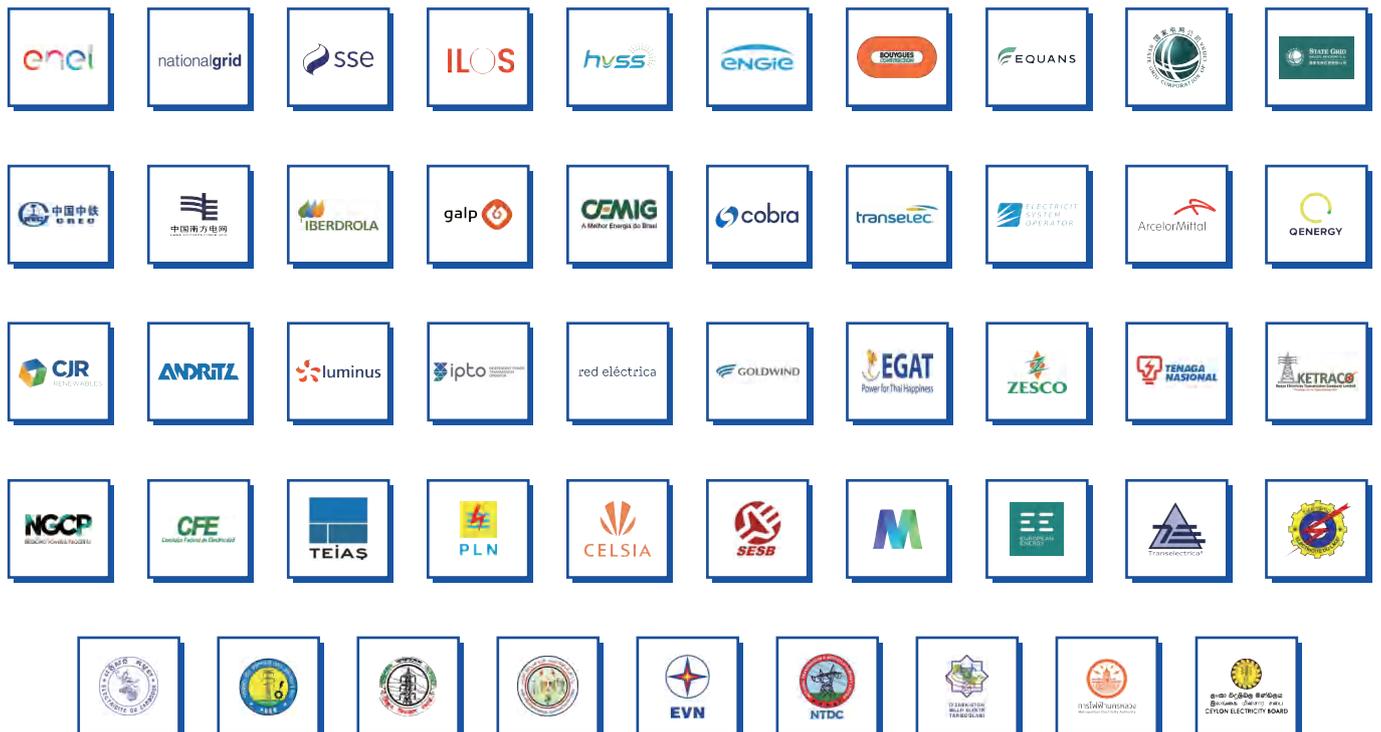




Global Marketing & Service Layout



Our Global Clients





Swatten Europe Case



Swatten APAC Case



Facebook



LinkedIn



YouTube

FOLLOW US!

