



# 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.



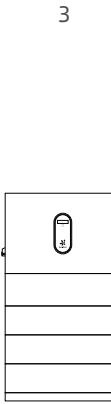
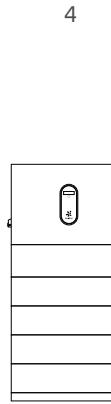
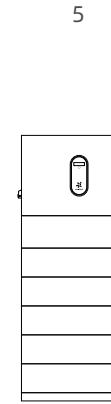
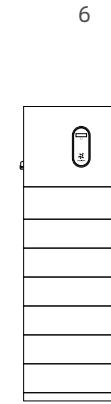
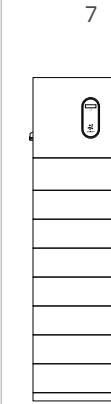
# All-in-one System Single Phase (HV) (5-10) kW

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
<b>PV (input)</b>				
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		
<b>Battery</b>				
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 (89.6 kWh)			
<b>Backup Output (On-Grid Mode)</b>				
Rated output power [W]	6000		14500	
Rated output current [A]	27		63	
<b>Backup Output (Off-Grid Mode)</b>				
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			
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			
<b>Grid (input/output)</b>				
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			
<b>Efficiency</b>				
Max. efficiency/European efficiency [%]	97.70/97.30		97.40/96.80	97.50/97.10
<b>Protection &amp; Function</b>				
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			
<b>General Data</b>				
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**
<b>Technical data</b>						
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.

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Stock listed in 2004 (SZSE002028)

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2025 Turnover

**1400+**

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

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**22**

22 Manufacturing bases

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

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Full range product: 10kV -1,000kV

**esGrid**

Grid-level energy storage

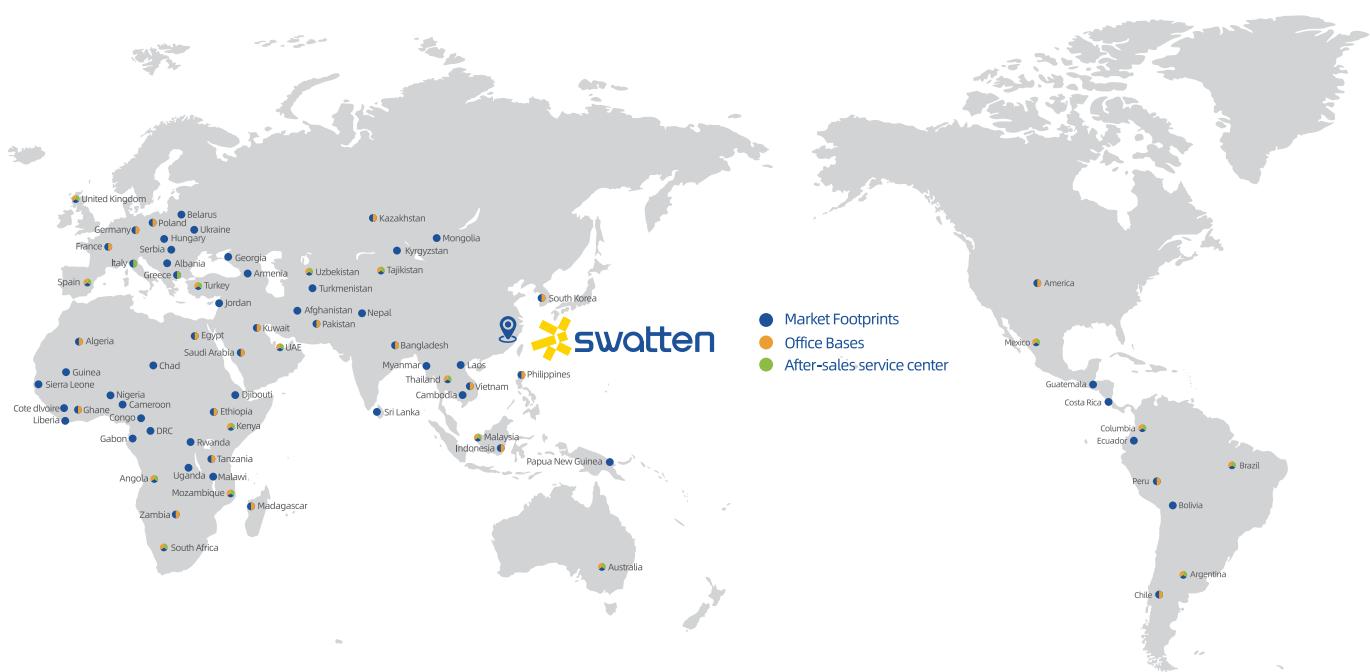
Sieyuan Utility Scale BESS

 **swatten**  
Powered by Sieyuan

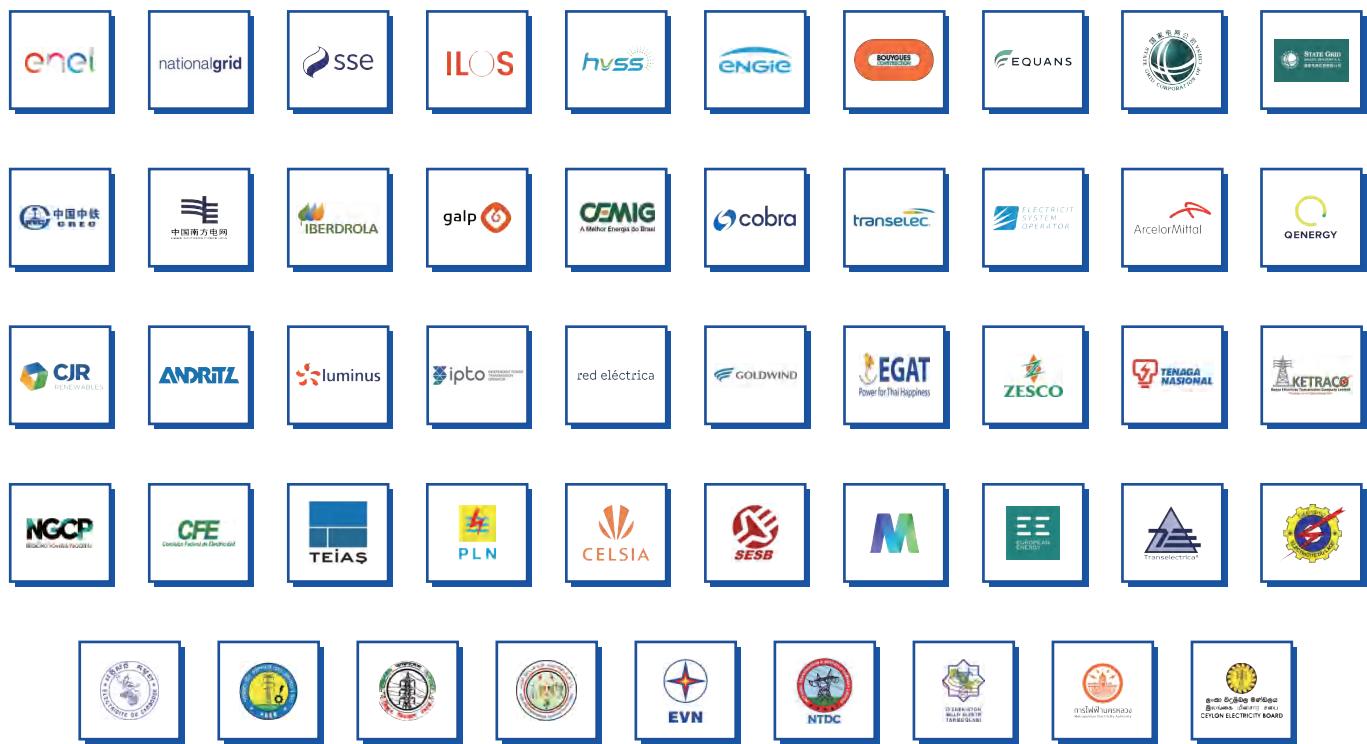
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# Global Marketing & Service Layout



# Our Global Clients



## Swatten Europe Case



## Swatten APAC Case



## Compatible Battery Brand

\* For detailed list please contact our technical team



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