



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 Three Phase (HV) (10-20) kW

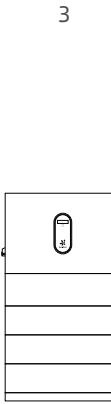
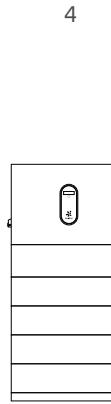
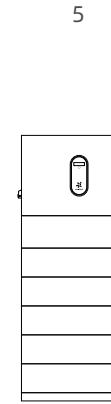
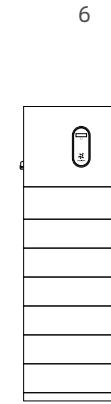
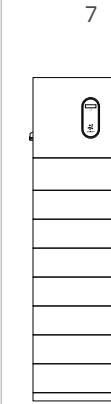
Type Designation	All-in-one sys-10kW-TH PRO	All-in-one sys-15kW-TH	All-in-one sys-20kW-TH
PV (input)			
Max. recommended PV array power [Wp]	20000	30000	40000
Max. PV input voltage* [V]		1000	
Rated PV input voltage [V]		650	
Start-up input voltage [V]		150	
MPPT voltage range [V]		150-950	
No. of MPPT/Strings per MPPT	3 (2/1/1)		3 (2/2/1)
Max. PV input current [A]	64 (32/16/16)		80 (32/32/16)
Max. DC short-circuit current [A]	80 (40/20/20)		100 (40/40/20)
Battery			
Battery type	LiFePO4 Prismatic Cell		
Max. charge/discharge current [A]	30/30		
Battery voltage range [V]	100-800		
Nominal capacity range	9.6 kWh-25.6 kWh (3.2 kWh / 50 Ah per module)		
Number of connectable modules	Max. 8 modules for each stack, Max. 4 stacks in parallel (102.4kWh)		
Backup (output)			
Rated output power (off-grid mode) [VA]	10000	15000	20000
Peak output power** (off-grid mode)	16800 W / 16800 VA, 10s	25500 W / 25500 VA, 10s	32000 W / 32000 VA, 10s
Max. output power (on-grid mode)		43000 W / 43000 VA	
Max. output current (on-grid mode) [A]		3*63	
Backup switching time [ms]		≤4	
Rated voltage [V]	3/N/PE, 220/380; 230/400; 240/415		
Frequency range [Hz]	50/60		
Total harmonic distortion (THDv, rated power, linear load) [%]	≤2		
Grid (input/output)			
Max. AC power from grid	43000 W / 43000 VA		
Rated AC output power [VA]	10000	15000	20000
Max. AC output power [VA]	10000	15000	20000
Max. AC output current [A]	15.2	22.8	30.3
Rated AC voltage [V]	3/N/PE, 220/380; 230/400; 240/415		
AC voltage range [V]	270-480		
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/ Adjustable power factor	> 0.99/0.8.leading to 0.8 lagging		
Efficiency			
Max. effciency/European effciency [%]	98.00/97.50		98.10/97.60
Protection & Function			
Parallel*	Master-slave mode		
Surge protection	Type II, DC and AC		
Overvoltage category	II DC and III AC		
Protective class	Class I		
Grid monitoring	Yes		
DC reverse polarity protection	Yes		
Battery input reverse polarity protection	Yes		
Insulation monitoring	Yes		
AC short-circuit protection	Yes		
Residual current protection	Yes		
DC switch (PV)	Yes		
Over-heat protection	Yes		
AFCI	OPT		
General Data			
Topology (PV/Battery)	Transformerless		
Degree of protection	IP65		
Mounting method	Floor-standing		
Operating ambient temperature range [°C]	-25-60 (Derating above 45)		
Storage temperature [°C]	-20-45 (≤1 Month)/-20-25 (≤6 Months)		
Allowable relative humidity range [%]	5-95		
Cooling method	Natural convection		
Noise (Typical)	35 dB (A)		
Max. operating altitude [m]	2000		
Display	LED		
Communication	2*RS485/1*CAN/WLAN		
DI/DO	4*DI/2*DO/DRMO		
DC connection type	MC4 (PV, Max. 6 mm ²)		
AC connection type	Plug and play terminals (Grid / Backup, Max. 10 mm ²)		

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

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

*** Detail refer to inverters parallel configuration in User Manual

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

Public Co.

Founded in 1993
Stock listed in 2004 (SZSE002028)

US\$5.0 Billion

2025 Turnover

1400+

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

TOP 3

Sieyuan 思源电气
Electrical Equip. Manufacturer

22

22 Manufacturing bases

100+

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

1,000kV

Full range product: 10kV -1,000kV

esGrid

Grid-level energy storage

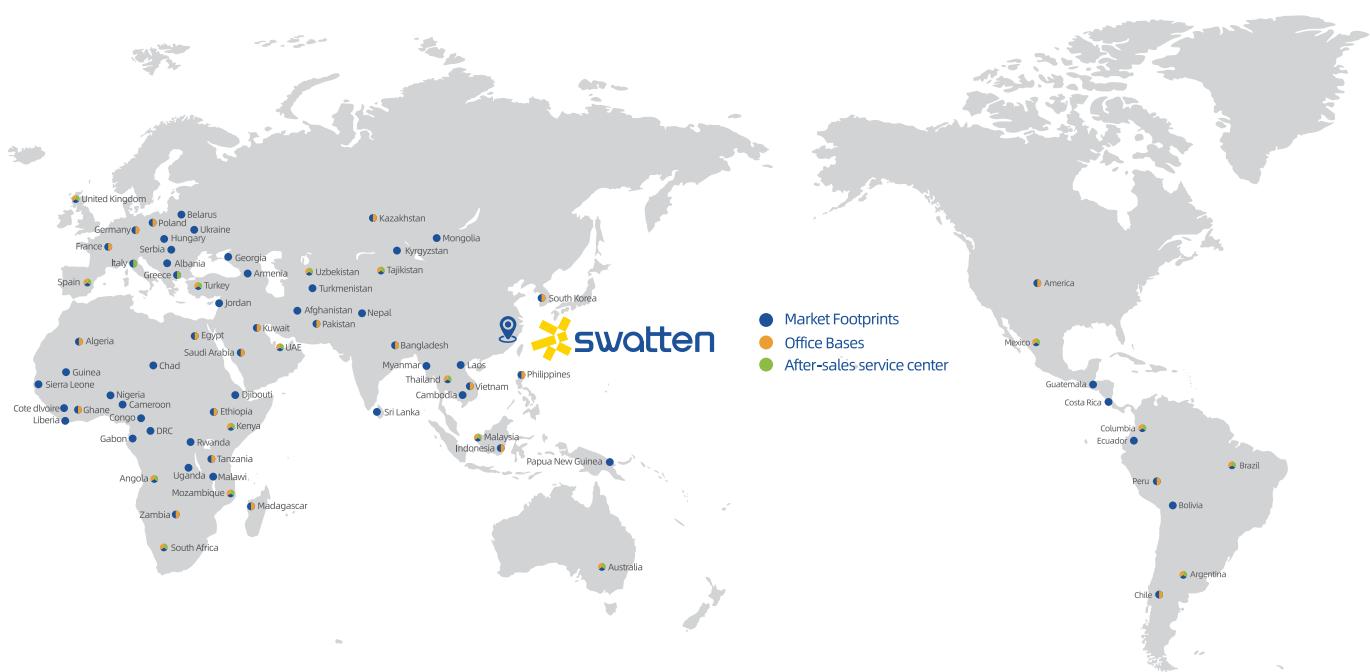
Sieyuan Utility Scale BESS

 **swatten**
Powered by Sieyuan

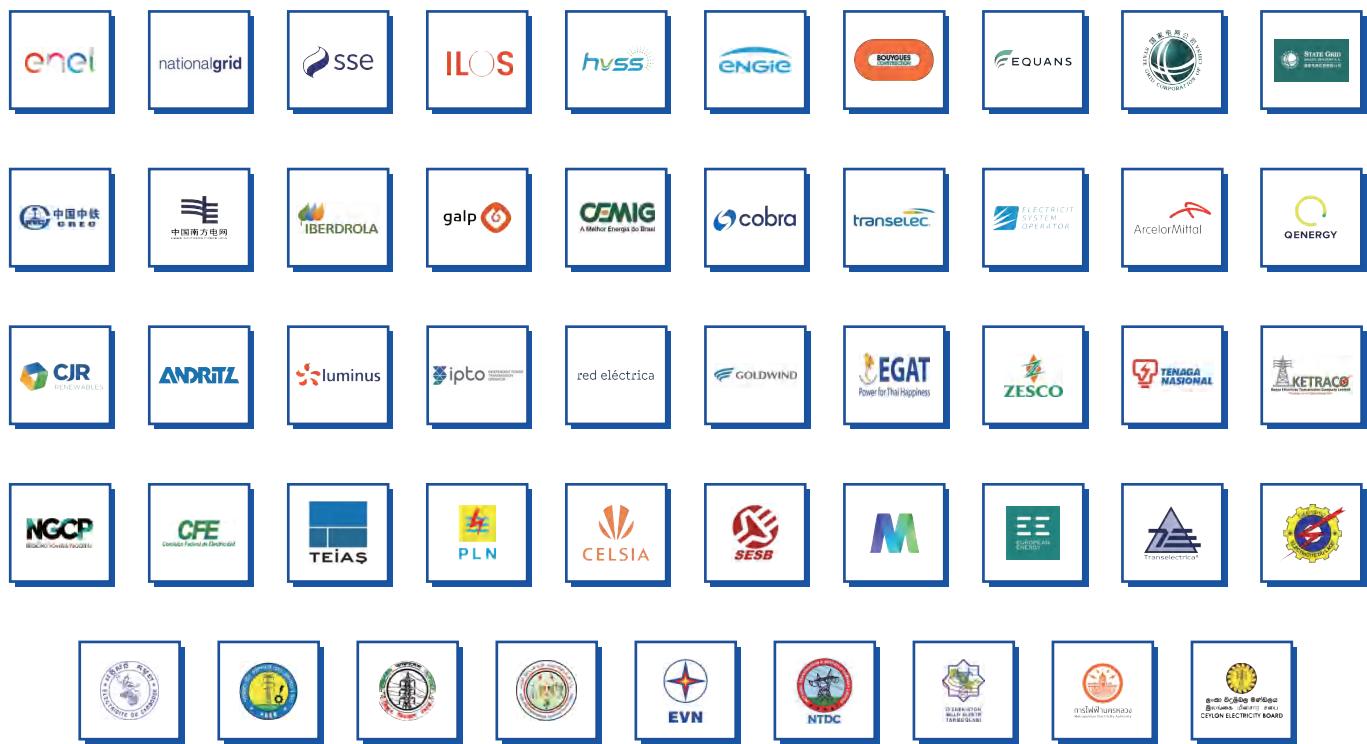
C&I and Residential BESS



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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