



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

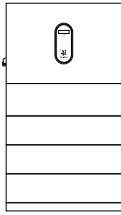
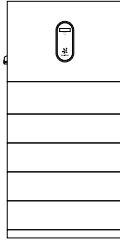
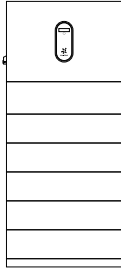
Type Designation	All-in-one sys-10kW-TH PRO		All-in-one sys-15kW-TH	All-in-one sys-20kW-TH
PV (input)				
Max. recommended PV array power [Wp]	20000		30000	40000
Max. PV input voltage* [V]			1000	
Rated PV input voltage [V]			650	
Start-up input voltage [V]			150	
MPPT voltage range [V]			150-950	
No. 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. efficiency/European efficiency [%]	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/DRM0			
DC connection type	MC4 (PV, Max. 6 mm²)			
AC connection type	Plug and play terminals (Grid / Backup, Max. 10 mm²)			

* 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.

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

US\$5.0 Billion

2025 Turnover

1,000kV

Full range product: 10kV -1,000kV

100+

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

Public Co.

Founded in 1993
Stock listed in 2004 (SZSE002028)

TOP 3

Sieyuan 思源电气
Electrical Equip. Manufacturer

1400+

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

22

22 Manufacturing bases



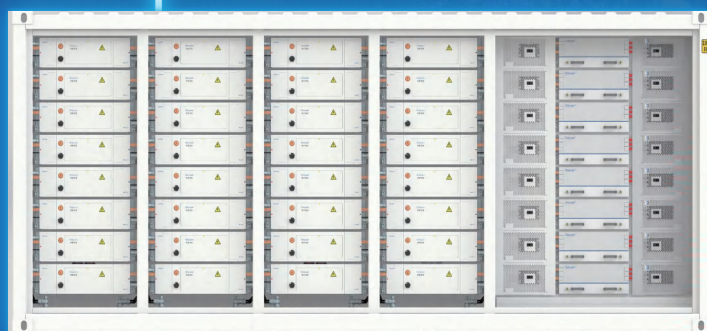
C&I and Residential BESS

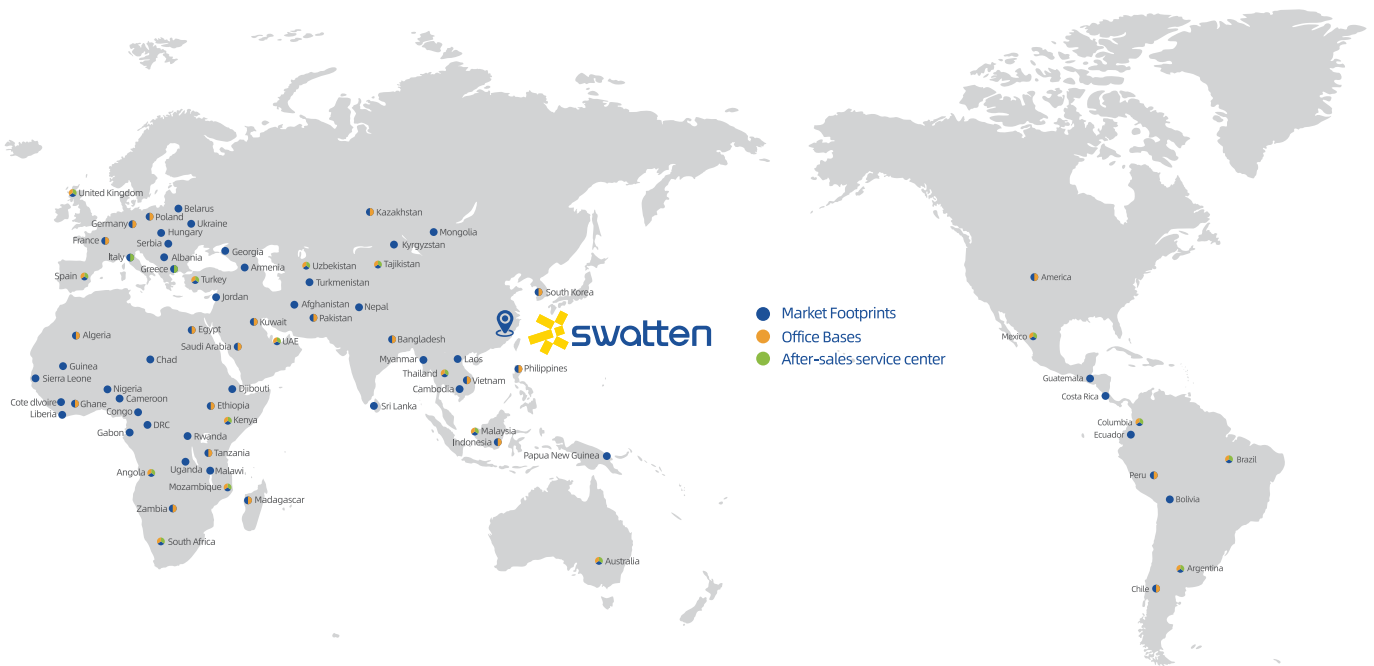


esGrid

Grid-level energy storage

Sieyuan Utility Scale BESS







Swatten's Global Cases



Facebook



Linkedin



YouTube



Instagram



Rednote

**FOLLOW
US!**

