



# 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

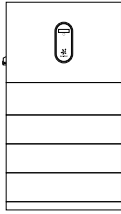
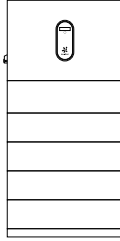




Type Designation	All-in-one sys-10kW-TH PRO		All-in-one sys-15kW-TH	All-in-one sys-20kW-TH
PV (input)				
Max. recommended PV array power [Wp]	20000		30000	40000
Max. PV input voltage* [V]			1000	
Rated PV input voltage [V]			650	
Start-up input voltage [V]			150	
MPPT voltage range [V]			150-950	
No. 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**
<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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### 22

22 Manufacturing bases

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Founded in 1993  
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2025 Turnover

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Full range product: 10kV -1,000kV

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1411 Qualified engineers are  
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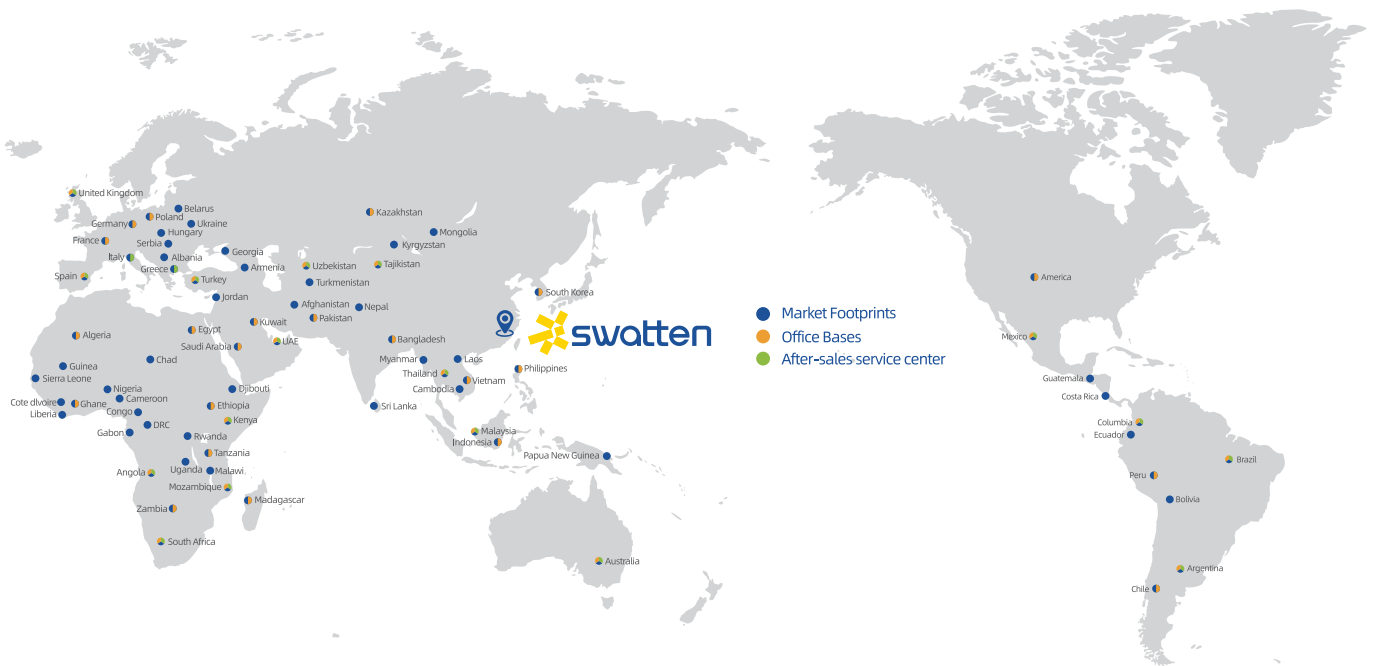
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\* For detailed list please contact our technical team



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