



# 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.



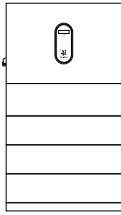
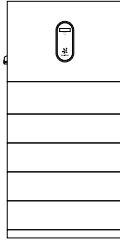
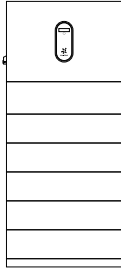
# All-in-one System Three Phase (HV) (5-10) kW

| Type Designation                                               | All-in-one sys-5kW-TH                                               | All-in-one sys-6kW-TH    | All-in-one sys-8kW-TH | All-in-one sys-10kW-TH |
|----------------------------------------------------------------|---------------------------------------------------------------------|--------------------------|-----------------------|------------------------|
| PV (input)                                                     |                                                                     |                          |                       |                        |
| Max. recommended PV array power [Wp]                           | 7500                                                                | 9000                     | 12000                 | 15000                  |
| Max. PV input voltage* [V]                                     |                                                                     |                          | 1000                  |                        |
| Rated PV input voltage [V]                                     |                                                                     |                          | 600                   |                        |
| Start-up input voltage [V]                                     |                                                                     |                          | 180                   |                        |
| MPPT voltage range [V]                                         |                                                                     |                          | 150-950               |                        |
| No. of MPPT/Strings per MPPT                                   |                                                                     | 2 (1/1)                  |                       | 2 (1/2)                |
| Max. PV input current [A]                                      |                                                                     | 32 (16/16)               |                       | 48 (16/32)             |
| Max. DC short-circuit current [A]                              |                                                                     | 40 (20/20)               |                       | 60 (20/40)             |
| Battery                                                        |                                                                     |                          |                       |                        |
| Battery type                                                   | LiFePO4 Prismatic Cell                                              |                          |                       |                        |
| Max. charge/discharge current [A]                              | 30/30                                                               |                          |                       |                        |
| Battery voltage range [V]                                      | 150-600                                                             |                          |                       |                        |
| 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)                             | 5000W/5000VA                                                        | 6000W/6000VA             | 8000W/8000VA          | 10000W/10000VA         |
| Peak output power** (off-grid mode)                            | 6000VA,5min/10000VA, 10s                                            | 7200VA,5min/10000VA, 10s | 12000VA, 5min         | 12000VA, 5min          |
| Max. output power (on-grid mode) [VA]                          | 5500                                                                | 6600                     | 8800                  | 11000                  |
| Max. output current (on-grid mode) [A]                         | 8.4                                                                 | 10                       | 13.3                  | 16.7                   |
| Backup switching time [ms]                                     | <10                                                                 |                          |                       |                        |
| Rated voltage [V]                                              | 3/N/PE 220/380; 230/400; 240/415 (±2%)                              |                          |                       |                        |
| Frequency range [Hz]                                           | 50/60 (±0.5%)                                                       |                          |                       |                        |
| Total harmonic distortion (THDv, rated power, linear load) [%] | ≤2                                                                  |                          |                       |                        |
| Grid (input/output)                                            |                                                                     |                          |                       |                        |
| Max. AC power from grid [VA]                                   | 12500                                                               | 15000                    | 18600                 | 20600                  |
| Rated AC output power [W]                                      | 5000                                                                | 6000                     | 8000                  | 10000                  |
| Max. AC output power [VA]                                      | 5500                                                                | 6600                     | 8800                  | 11000                  |
| Max. AC output current [A]                                     | 8.4                                                                 | 10                       | 13.3                  | 16.7                   |
| 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 [%]                        | 98.00/97.20                                                         | 98.20/97.50              | 98.40/97.90           |                        |
| Protection & Function                                          |                                                                     |                          |                       |                        |
| 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                                                  |                          |                       |                        |
| Max. operating altitude [m]                                    | 2000                                                                |                          |                       |                        |
| Display                                                        | LED                                                                 |                          |                       |                        |
| Communication                                                  | RS485/CAN/WLAN                                                      |                          |                       |                        |
| DI/DO                                                          | 1*DI/1*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.

# 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

### Public Co.

Founded in 1993  
Stock listed in 2004 (SZSE002028)

### US\$5.0 Billion

2025 Turnover

### TOP 3

**Sieyuan** 思源电气  
Electrical Equip. Manufacturer

### 1,000kV

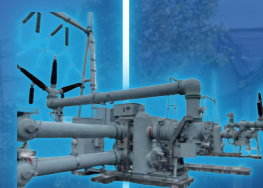
Full range product: 10kV - 1,000kV

### 100+

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

### 22

22 Manufacturing bases



C&I and Residential BESS



**esGrid**

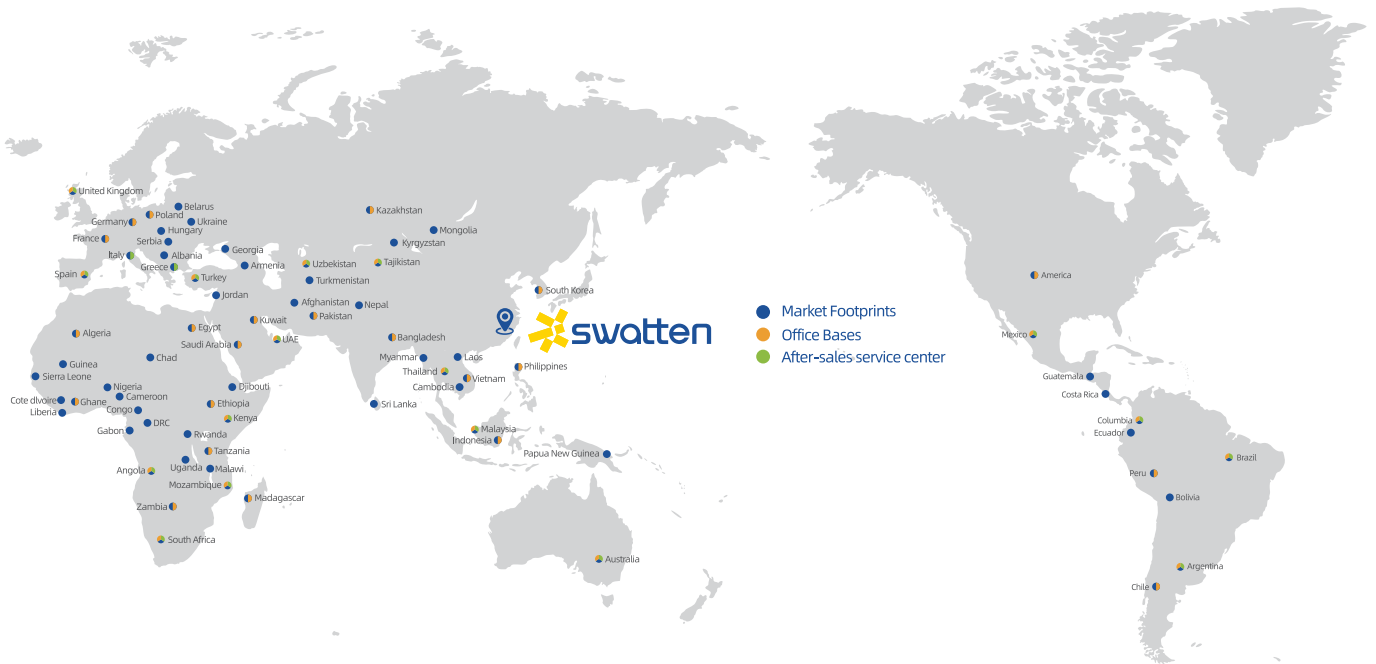
Grid-level energy storage

Sieyuan Utility Scale BESS





## Global Marketing & Service Layout



## Our Global Clients





## Swatten's Global Cases



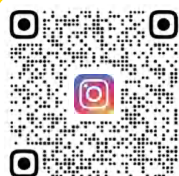
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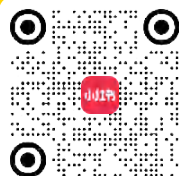
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