

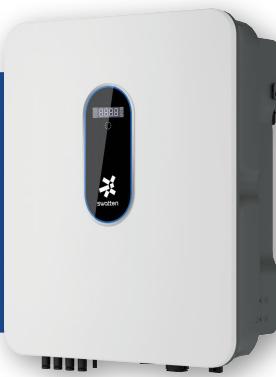


# Three Phase Hybrid Inverter (HV) (5-10) kW

FROM GRID TO HOME



# KEY FEATURES



**100%**

Unbalanced output at full power

**Max 3**

PV input

**Fanless**

Natural convection

**<10ms**

Off-grid switching

**98.4%**

Max. Efficiency

**4000m**

Max. operating altitude



# Three Phase Hybrid Inverter (HV) (5-10) kW

Type Designation	SiH-5kW-TH	SiH-6kW-TH	SiH-8kW-TH	SiH-10kW-TH
<b>PV (input)</b>				
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)
<b>Battery (input/output)</b>				
Battery type	LiFePO4 Prismatic Cell			
Battery voltage range [V]	150-600			
Max. charge/discharge current** [A]	30/30			
Max. charge/discharge power [W]	7500/6000	9000/7200	10600/10600	10600/10600
<b>Backup (output)</b>				
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 ( $\pm 2\%$ )			
Frequency range [Hz]	50/60 ( $\pm 0.5\%$ )			
Total harmonic distortion (THDV, rated power, linear load) [%]	$\leq 2$			
<b>Grid (input/output)</b>				
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			
<b>Efficiency</b>				
Max. efficiency/European efficiency [%]	98.00/97.20	98.20/97.50	98.40/97.90	
<b>Protection &amp; Function</b>				
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 (LV)	Yes			
AC short-circuit protection	Yes			
Residual current protection	Yes			
DC switch (PV)	Yes			
Over-heat protection	Yes			
AFCI	OPT			
<b>General Data</b>				
Topology (PV/battery)	Transformerless			
Degree of protection	IP65			
Dimensions (W*H*D) [mm]	450*550*185			
Weight [kg]	31			
Mounting method	Wall-mounting bracket			
Operating ambient temperature range [°C]	-25-60 (Derating above 45)			
Allowable relative humidity range (Non-condensing) [%]	0-100			
Cooling method	Natural convection			
Max. operating altitude	4000			
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

\*\* Depending on the connected battery

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

# 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

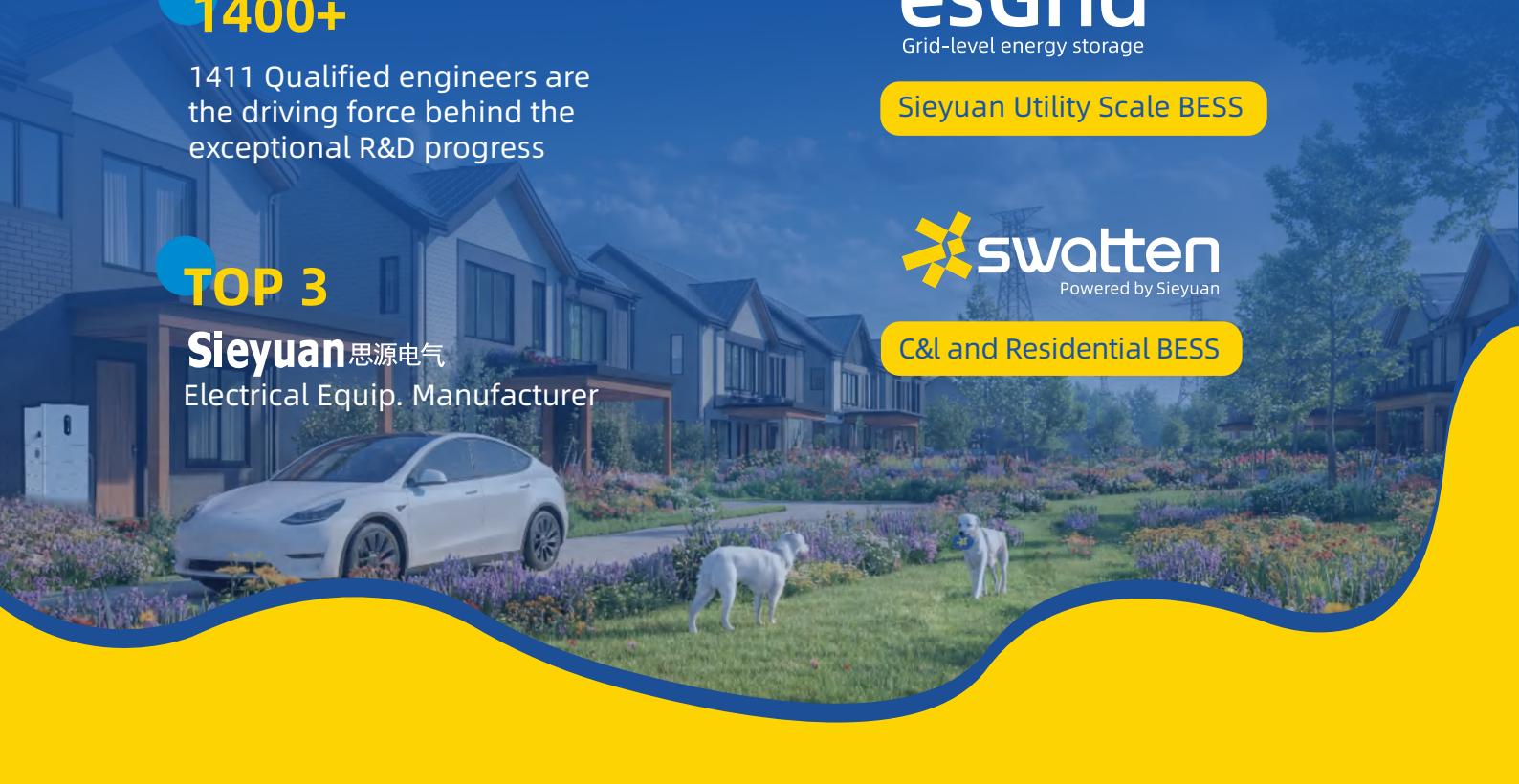
**esGrid**

Grid-level energy storage

Sieyuan Utility Scale BESS

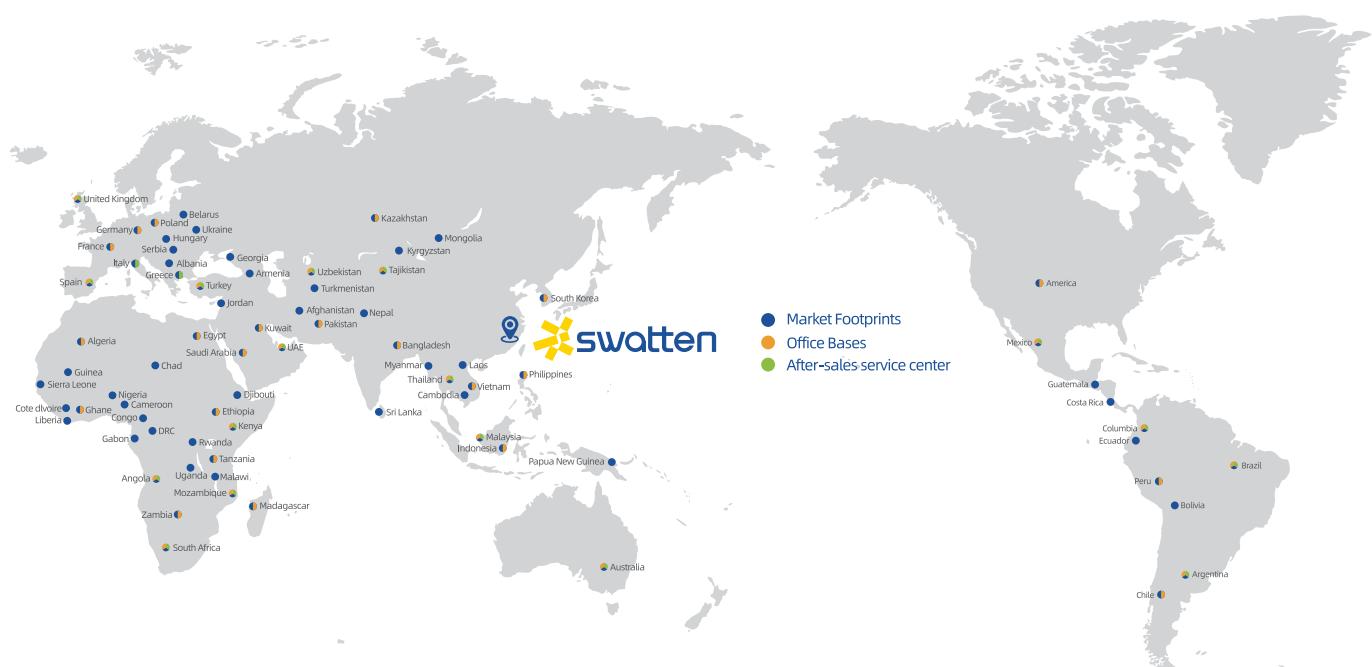
 **swatten**  
Powered by Sieyuan

C&I and Residential BESS

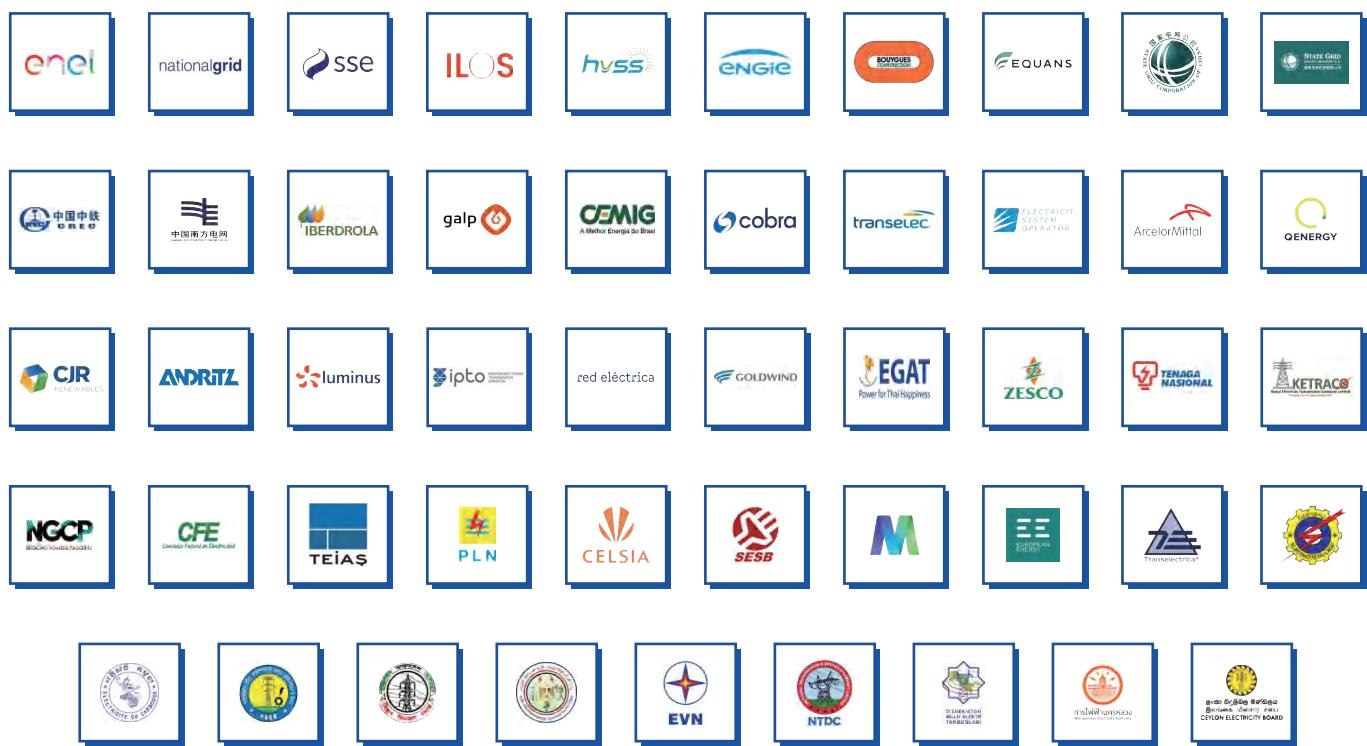




# Global Marketing & Service Layout



# Our Global Clients



## Swatten Europe Case



## Swatten APAC Case



## Compatible Battery Brand

\* For detailed list please contact our technical team



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