



# Single Phase Hybrid Inverter (LV) (3.6-6) kW

**FROM GRID TO HOME**



# KEY FEATURES



**50v**

Low starting voltage

**240%**

DC input oversizing

**100A**

Max. power charge and  
discharge current

**<10ms**

Off-grid switching

**100%**

Whole-home backup

**4000m**

Max. operating altitude





# Single Phase Hybrid Inverter (LV) (3.6-6) kW

Type Designation	SiH-3.6kW-SL	SiH-5kW-SL	SiH-6kW-SL
PV (input)			
Max. recommended PV array power [Wp]	8700	10000	11000
Max. PV input voltage* [V]	600		
Rated PV input voltage [V]	360		
Start-up input voltage [V]	50		
MPPT voltage range [V]	40-560		
No. of MPPT/Strings per MPPT	2 (1/1)		
Max. PV input current [A]	16		
Max. DC short-circuit current [A]	20		
Battery (input/output)			
Battery type	LiFePO4 Prismatic Cell		
Battery voltage range [V]	40-59		
Max. charge/discharge current** [A]	100/100		
Max. charge/discharge power [W]	5000/5000		
Backup Output (On-Grid Mode)			
Rated output power [W]	6000		
Rated output current [A]	27		
Backup Output (Off-Grid Mode)			
Rated output power	3680W/3680VA	5000W/5000VA	5000W/6000VA
Peak output power***	8400VA,10s		
Backup switching time [ms]	<10		
Rated voltage [V]	220/230/240 (±2%)		
Frequency range [Hz]	50/60 (±5%)		
Total harmonic distortion (THDv, rated power, linear load) [%]	≤2		
Grid (input/output)			
Max. AC power from grid [VA]	8700	10000	11000
Rated AC output power [W]	3680	5000	6000
Max. AC output power [VA]	3680	5000	6000
Max. AC output current [A]	16.7	22.8	27.3
Rated AC voltage [V]	220/230/240 (±2%)		
AC voltage range [V]	154-276		
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 [%]	97.50/97.00	97.70/97.30	
Protection & Function			
Surge protection	Type II, DC and AC		
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		
Dimensions (W*H*D) [mm]	600*365*194		
Weight [kg]	≤23.5		
Mounting method	Wall-mounting bracket		
Operating ambient temperature range [°C]	-25-60		
Allowable relative humidity range (Non-condensing) [%]	0-100		
Cooling method	Natural convection		
Max. operating altitude [m]	4000		
Display	LED		
Communication	RS485/CAN/WLAN		
DI/DO	1*DI/1*DO/DRM		
DC connection type	MC4		
Battery connection type	Screws & Fasteners		
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

### 22

22 Manufacturing bases

### Public Co.

Founded in 1993  
Stock listed in 2004 (SZSE002028)

### 100+

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

### US\$5.0 Billion

2025 Turnover

### 1,000kV

Full range product: 10kV -1,000kV

### 1400+

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

## esGrid

Grid-level energy storage

Sieyuan Utility Scale BESS

### TOP 3

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

 **swatten**  
Powered by Sieyuan

C&I and Residential BESS









## Swatten Europe Case



## Swatten APAC Case



## Compatible Battery Brand

\* For detailed list please contact our technical team



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