swatten
Powered by Sieyuan

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

Smarter Power Better Life

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
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 (input/output)				
Battery type	Li-ion battery			
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
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				
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 (LV)	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]	450*550*185			
Weight [kg]	31			
Mounting method	Wall-mounting bracket			
Operating ambient temperature range [℃]	-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			

* Depending on the connected battery

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

*** Detail refer to inverters parallel configuration in User Manual

About swatten

Powered by Sieyuan

Full Range From Power Generation, Transmission, Distribution To Energy Storage

32 years

With 32 years of experience, specialized in equipment manufacturing and engineering services

Public Co.

Founded in 1993
Stock listed in 2004 (SZSE002028)

US$3.2 Billion

2024 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

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C&I and Residential BESS

Shanghai Sieyuan Watten Technology Co., Ltd.
Member of Sieyuan Electric Co., Ltd.

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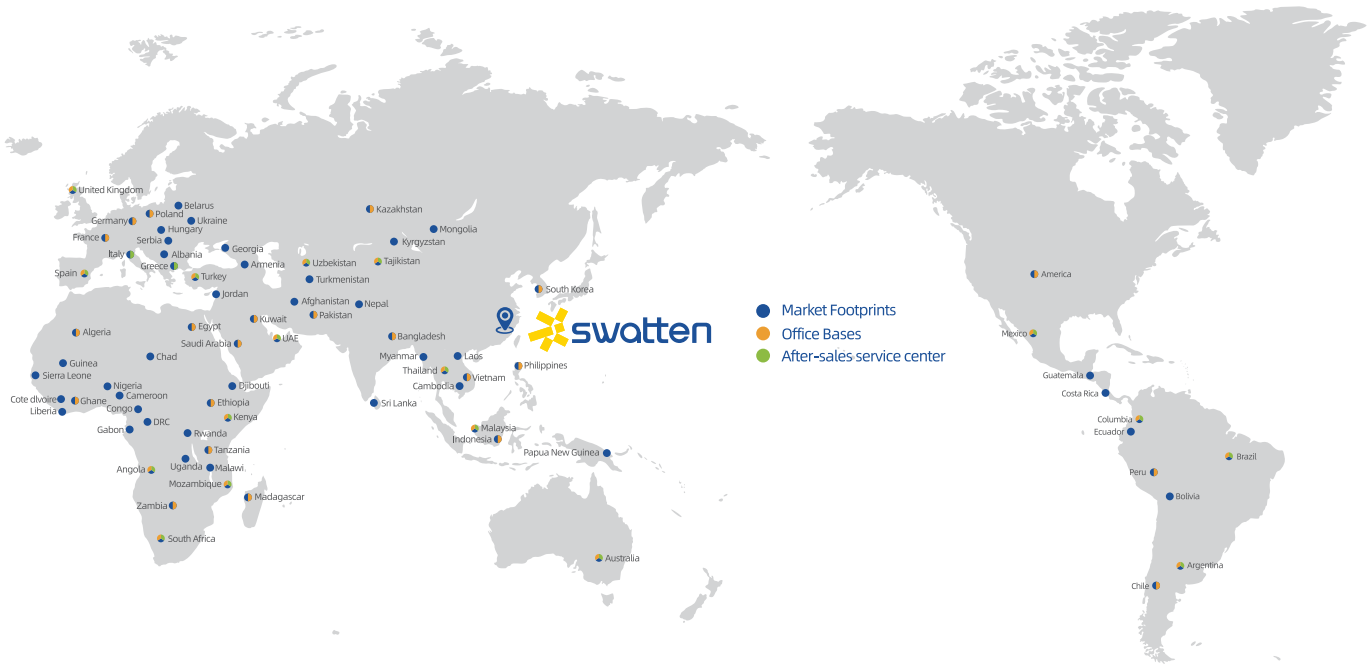
Global Marketing & Service Layout



Our Global Clients

Swatten Europe Case



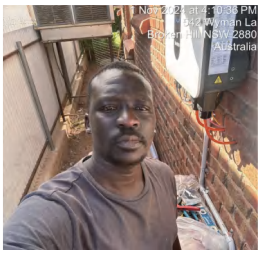




Swatten APAC Case





Compatible Battery Brand

* For detailed list please contact our technical team

ATL · POWERAMP · BYD · EVE · PYLONTECH · Dyness · Ampace · HAME · VESTWOODS · CIE

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