swatten
Powered by Sieyuan

CEDRES ENERGY



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

30 years

With 30+ 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

60+

With 10,000+ employees in 60+ countries and regions

1,000kV

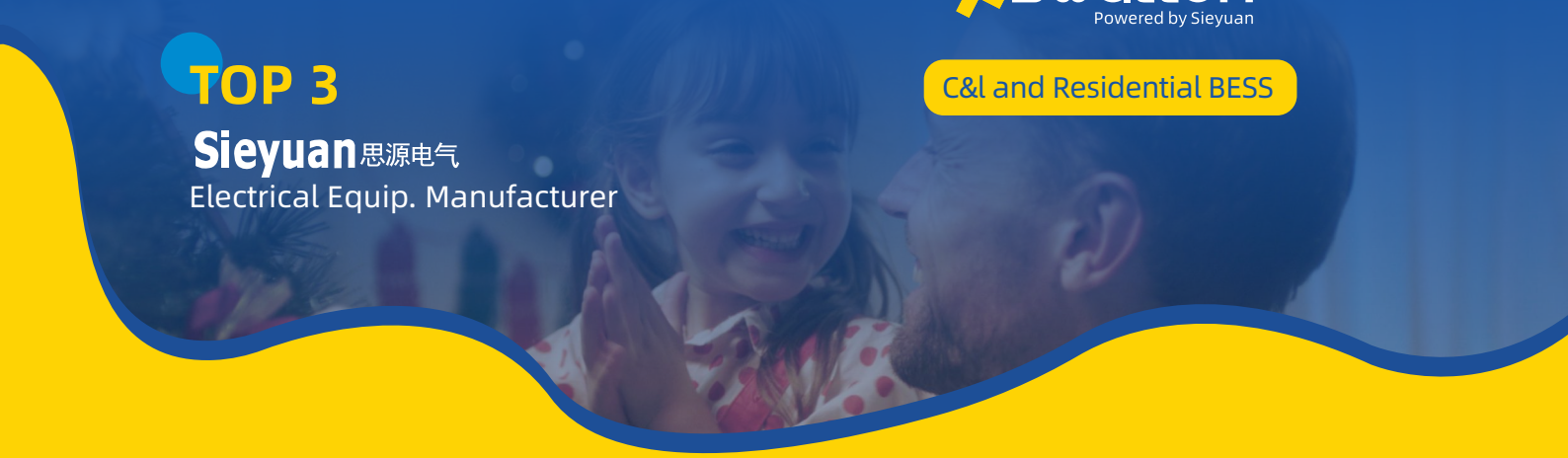
Full range product: 10kV -1,000kV

esGrid
Grid-level energy storage

Sieyuan Utility Scale BESS

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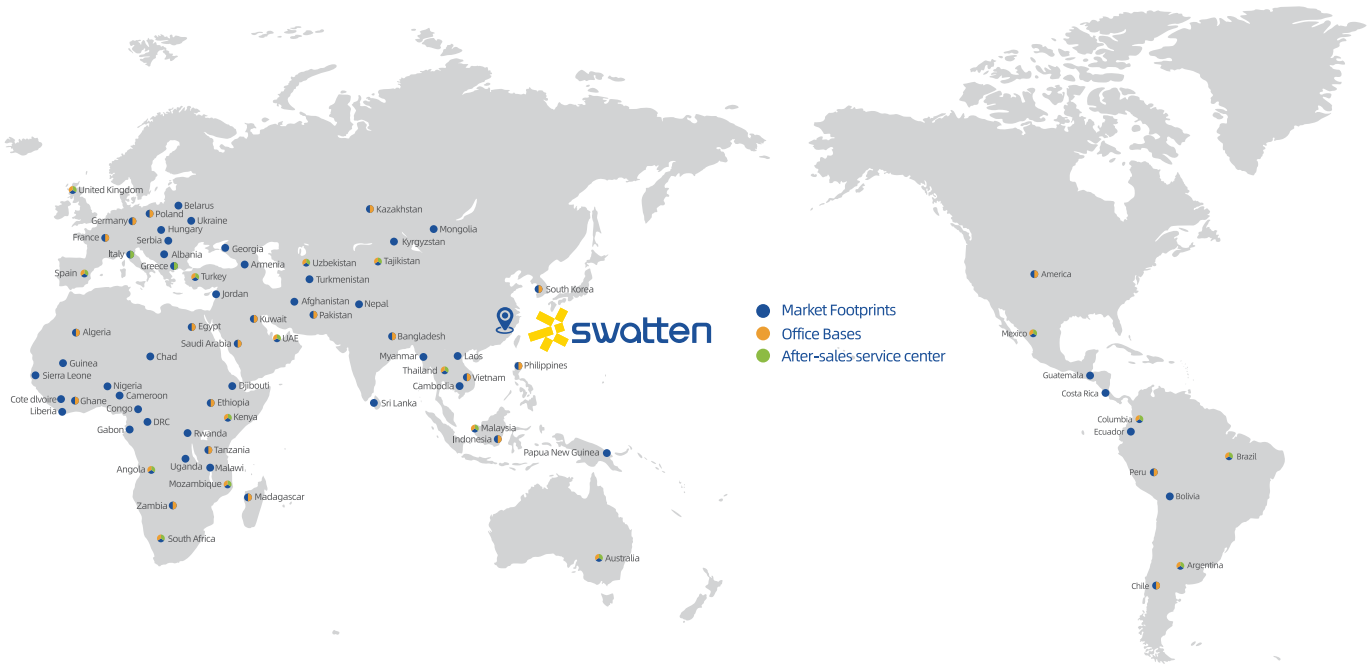
C&I and Residential BESS



Shanghai Sieyuan Watten Technology Co., Ltd.
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Global Marketing & Service Layout



Our Global Clients

Swatten Europe Case







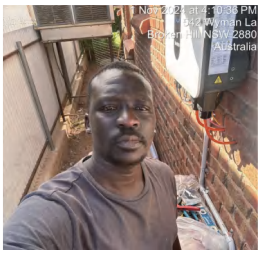


Swatten APAC Case







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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