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BNEF Tier 1
Energy Storage Manufacturer



All-In-One Pro (HV) (5-20) kW

FROM GRID TO HOME

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

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BNEF Tier 1
Energy Storage Manufacturer



ALL-IN-ONE PRO 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 Pro System Single Phase (HV) (5-10) kW

Type Designation	All-in-one P sys-5kW-SH	All-in-one P sys-6kW-SH	All-in-one P sys-8kW-SH	All-in-one P sys-10kW-SH
PV (input)				
Max. recommended PV array power [Wp]	12000	13000	16000	20000
Max. PV input voltage* [V]	600			
Min. operating PV voltage [V]	40			
Start-up input voltage [V]	50			
Rated PV input voltage [V]	360			
MPPT voltage range [V]	40-560			
No. of MPPT/Strings per MPPT	2 (1/1)		4 (1/1/1/1)	
Max. PV input current [A]	32 (16/16)		64 (16/16/16/16)	
Max. DC short-circuit current [A]	40 (20/20)		80 (20/20/20/20)	
Max. current for each input connector [A]	20			
Battery				
Battery type	LiFePO4 Prismatic Cell			
Max. charge/discharge current [A]	30/30	30/30	50/50	50/50
Battery voltage range [V]	80-460			
Nominal capacity range	10.24 kWh-40.96 kWh (5.12 kWh/100 Ah per module)			
Number of connectable modules	2-8 modules			
Backup Output (On-Grid Mode)				
Rated output power [W]	6000		14500	
Rated output current [A]	27		63	
Backup Output (Off-Grid Mode)				
Rated output power	5000 W / 5000 VA	6000 W / 6000 VA	8000 W/8000 VA	9999 W/9999 VA
Peak output power**	8400 VA, 10s		13680 VA, 10s	
Backup switching time [ms]	<10			
Rated voltage [V]	220/230/240 (±2%)			
Frequency range [Hz]	50/60 (±0.5%)			
Total harmonic distortion (THDv, rated power, linear load) [%]	≤2			
Grid (input/output)				
Max. AC input power from grid [VA]	12000	13000	14500	
Rated AC output power [W]	5000	6000	8000	9999
Max. AC output power [VA]	5000	6000	8000	9999
Rated AC output current (at 230V) [A]	21.8	26.1	36.4	45.5
Max. AC output current [A]	22.8	27.3	36.4	45.5
Rated AC voltage [V]	220/230/240			
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	> 0.99			
Adjustable power factor	adjustable 0.8.leading to 0.8 lagging			
Effciency				
Max. effciency/European effciency [%]	97.70/97.30		97.40/96.80	97.50/97.10
Protection & Function				
Surge protection	DC type II/AC type II			
Grid monitoring	Yes			
DC reverse polarity protection	Yes			
Battery input reverse polarity protection	Yes			
AC short-circuit protection	Yes			
Leakage current protection	Yes			
DC switch (PV)	Yes			
DC fuse (Battery)	Yes			
General Data				
Topology (PV/Battery)	Transformerless			
Degree of protection	IP65			
Mounting method	Floor-standing			
Operating ambient temperature range [℃]	-25-60			
Storage temperature [℃]	-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		1*DI/2*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 Pro System Three Phase (HV) (5-10) kW

Type Designation	All-in-one P sys-5kW-TH	All-in-one P sys-6kW-TH	All-in-one P sys-8kW-TH	All-in-one P 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	15.36 kWh-46.08 kWh (5.12 kWh/100 Ah per module)			
Number of connectable modules	3-9 modules			
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			
Effciency				
Max. effciency/European effciency [%]	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 [℃]	-25-60 (Derating above 45)			
Storage temperature [℃]	-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 Pro System Three Phase (HV) (10-20) kW

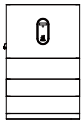
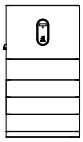
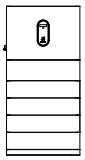
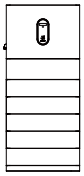
Type Designation	All-in-one P sys-10kW-TH PRO	All-in-one P sys-15kW-TH	All-in-one P sys-20kW-TH
PV (input)			
Max. recommended PV array power [Wp]	20000	30000	40000
Max. PV input voltage* [V]	1000		
Rated PV input voltage [V]	650		
Start-up input voltage [V]	150		
MPPT voltage range [V]	150-950		
No. of MPPT/Strings per MPPT	3 (2/1/1)		3 (2/2/1)
Max. PV input current [A]	64 (32/16/16)		80 (32/32/16)
Max. DC short-circuit current [A]	80 (40/20/20)		100 (40/40/20)
Battery			
Battery type	LiFePO4 Prismatic Cell		
Max. charge/discharge current [A]	50/50		
Battery voltage range [V]	100-800		
Nominal capacity range	15.36 kWh-46.08 kWh (5.12 kWh/100 Ah per module)		
Number of connectable modules	3-9 modules		
Backup (output)			
Rated output power (off-grid mode) [VA]	10000	15000	20000
Peak output power** (off-grid mode)	16800 W / 16800 VA, 10s	25500 W / 25500 VA, 10s	32000 W / 32000 VA, 10s
Max. output power (on-grid mode)	43000 W / 43000 VA		
Max. output current (on-grid mode) [A]	3*63		
Backup switching time [ms]	≤4		
Rated voltage [V]	3/N/PE, 220/380; 230/400; 240/415		
Frequency range [Hz]	50/60		
Total harmonic distortion (THDv, rated power, linear load) [%]	≤2		
Grid (input/output)			
Max. AC power from grid	43000 W / 43000 VA		
Rated AC output power [VA]	10000	15000	20000
Max. AC output power [VA]	10000	15000	20000
Max. AC output current [A]	15.2	22.8	30.3
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		
Effciency			
Max. effciency/European effciency [%]	98.00/97.50	98.10/97.60	
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	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 [℃]	-25-60 (Derating above 45)		
Storage temperature [℃]	-20-45 (≤1 Month)/-20-25 (≤6 Months)		
Allowable relative humidity range [%]	5-95		
Cooling method	Natural convection		
Noise (Typical)	35 dB (A)		
Max. operating altitude [m]	2000		
Display	LED		
Communication	2*RS485/1*CAN/WLAN		
DI/DO	4*DI/2*DO/DRM0		
DC connection type	MC4 (PV, Max. 6 mm^2)		
AC connection type	Plug and play terminals (Grid / Backup, Max. 10 mm^2)		

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection

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

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

All-in-one Pro System Batteries (HV) (10.44-47) kWh

Type Designation	SieB-HP10K4-F	SieB-HP15K6-F	SieB-HP20K8-F	SieB-HP26K1-F
Technical data				
Usable energy* [kWh]	10.24	15.36	20.48	25.60
Depth of discharge	Max.100% DOD (settable)			
Module type	SieB-HP5222-F			
Module parameter	51.2V 100Ah 640*400*184 45.2kg±1kg			
Cell type	LFP (LiFePO4)			
Max. module configuration	2**** 	3 	4 	5 
Cell configuration	1P32S	1P48S	1P64S	1P80S
Nominal voltage [V]	102.4	153.6	204.8	256
Operating voltage range [V]	91.2-115.2	136.8-172.8	182.4-230.4	228-288
Communication	CAN / RS485			
Short circuit current [A]	1900			
Weight [kg]	144.1	189.3	234.5	279.7
Dimensions (W*D*H) [mm]	640*400*1000	640*400*1150	640*400*1300	640*400*1450
Operating temperature [°C]	Charge: 0-50 / Discharge: -20-50			
Storage temperature [°C]	-20-45 (≤1 Months) / -20-25 (≤6 Months)			
Humidity [%]	5-95			
Altitude [m]	≤2000			
Degree of protection	IP66 (Indoor / Outdoor)			
Fire Protection Function	Optional			
Cooling	Natural convection			
Installation location	Floor-standing			
Display	SOC indicator，Status indicator			
Warranty***	10 Years			

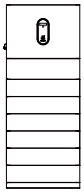
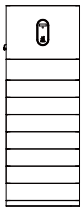
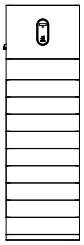
* Test conditions： 3.0V~3.5V ， 0.2C Charge(CC-CV) and Discharge at 25±3°C; 100% depth of discharge (DOD);

** Max. Continuous Current / Power derating will occur related to Temperature/ SOC/ Humidity;
Max. Continuous Power equals Operating voltage range times Max. charge/discharge current as different inverter type.

*** Refer to Swatten SieB-HP-F Limited Warranty Letter.

**** 2 Modules only for single phase, 9 Modules only for three phase.

All-in-one Pro System Batteries (HV) (10.44-47) kWh

Type Designation	SieB-HP31K3-F	SieB-HP36K5-F	SieB-HP41K7-F	SieB-HP47K0-F
Technical data				
Usable energy* [kWh]	30.72	35.84	40.96	46.08
Depth of discharge	Max.100% DOD (settable)			
Module type	SieB-HP5222-F			
Module parameter	51.2V 100Ah 640*400*184 45.2kg±1kg			
Cell type	LFP (LiFePO4)			
Max. module configuration	6 	7 	8 	9**** 
Cell configuration	1P96S	1P112S	1P128S	1P144S
Nominal voltage [V]	307.2	358.4	409.6	460.8
Operating voltage range [V]	273.6-345.6	319.2-403.2	364.8-460.8	410.4-518.4
Communication	CAN / RS485			
Short circuit current [A]	1900			
Weight [kg]	324.9	370.1	415.3	460.5
Dimensions (W*D*H) [mm]	640*400*1600	640*400*1750	640*400*1900	640*400*2050
Operating temperature [°C]	Charge: 0-50 / Discharge: -20-50			
Storage temperature [°C]	-20-45 (≤1 Months) / -20-25 (≤6 Months)			
Humidity [%]	5-95			
Altitude [m]	≤2000			
Degree of protection	IP66 (Indoor / Outdoor)			
Fire Protection Function	Optional			
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);

** Max. Continuous Current / Power derating will occur related to Temperature/ SOC/ Humidity;
Max. Continuous Power equals Operating voltage range times Max. charge/discharge current as different inverter type.

*** Refer to Swatten SieB-HP-F Limited Warranty Letter.

**** 2 Modules only for single phase, 9 Modules only for three phase.

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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

1400+
1411 Qualified engineers are the driving force behind the exceptional R&D progress

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

22
22 Manufacturing bases



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C&I and Residential BESS

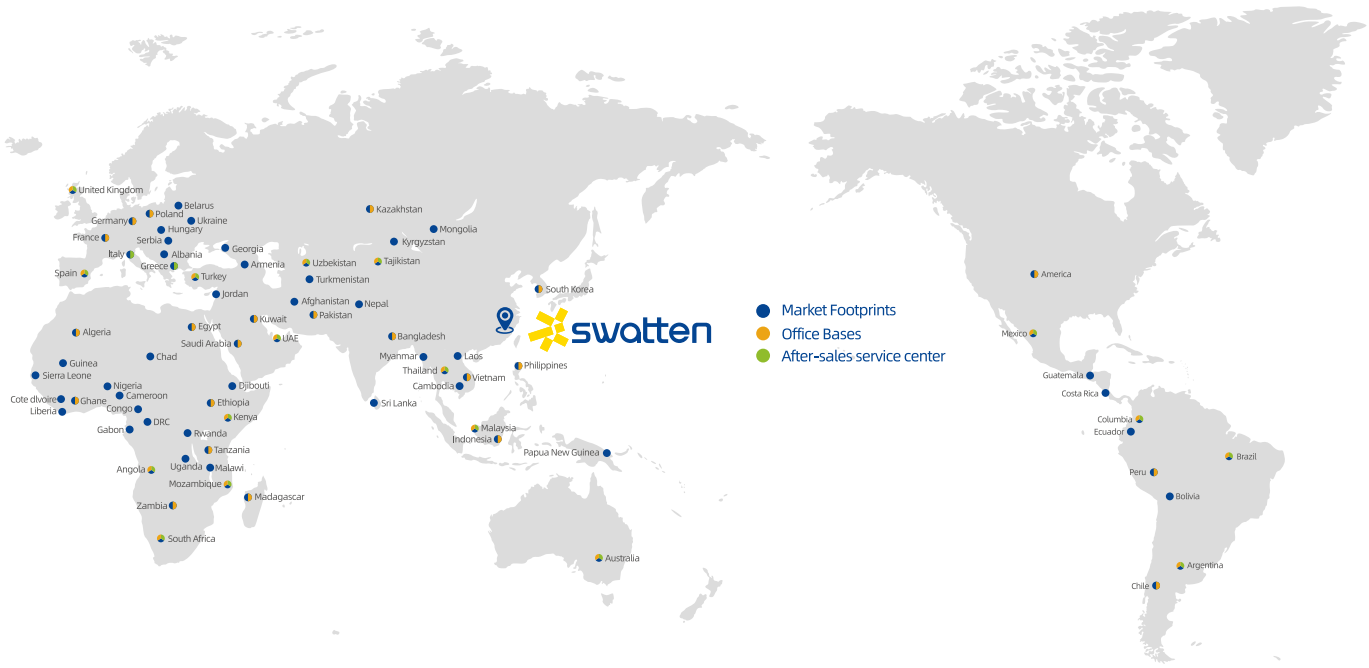


esGrid
Grid-level energy storage

Sieyuan Utility Scale BESS



Global Marketing & Service Layout



Our Global Clients

Swatten's Global Cases

























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