

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

Smarter Power Better Life

KEY FEATURES

100% Unbalanced output at full power

<

Max 3 PV input



98.4% Max. Efficiency

4000m Max. operating altitude

Natural convection

Fanless



Swatter

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

Type Designation	SiH-5kW-TH	SiH-6kW-TH	SiH-8kW-TH	SiH-10kW-TH
PV (input)				
fax. recommended PV array power [Wp]	7500	9000	12000	15000
Aax. PV input voltage [V]	7500	100		15000
ated PV input voltage [V]		600		
tart-up input voltage [V]		180		
IPPT voltage range [V]		150-9		
No. of MPPT/Strings per MPPT		2 (1/1)		2 (1/2)
lax. PV input current [A]		32 (16/16)		48 (16/32)
lax. DC short-circuit current [A]		40 (20/20)		60 (20/40)
Battery (input/output)				
		Li-ion ba	atton/	
Battery type Battery voltage range [V]				
Aax. charge/discharge current* [A]	150-600 30/30			
/ax. charge/discharge power [W]	7500/6000	9000/7200	10600/10600	10600/10600
Backup (output)	, , , , , , , , , , , , , , , , , , , ,	2000, 200	10000, 10000	10000, 10000
ated output power (off-grid mode)	5000W/5000VA	6000W/6000VA	8000W/8000VA	10000W/10000VA
eak output power (off-grid mode)**	6000VA, 5min/10000VA, 10s	7200VA, 5min/10000VA, 10s	12000VA, 5min	12000VA, 5min
lax. output power (on-grid mode) [VA]	5500	6600	8800	11000
ax. output current (on-grid mode) [A]	8.4	10	13.3	16.7
ackup switching time [ms]	<10			
ated voltage [V]	3/N/PE, 220/380; 230/400; 240/415 (±2%)			
requency range [Hz]	50/60 (±0.5%)			
otal harmonic distortion THDv, rated power, linear load) [%]		≤2		
Grid (input/output)				
1ax. AC power from grid [VA]	12500	15000	18600	20600
Rated AC output power [W]	5000	6000	8000	10000
lax. AC output power [VA]	5500	6600	8800	11000
1ax. AC output current [A]	8.4	10	13.3	16.7
Rated AC voltage [V]		3/N/PE, 220/380; 2		
C voltage range [V]	270-480			
	50/60			
Rated grid frequency [Hz]				
Frid frequency range [Hz]		45-55/5		
rid frequency range [Hz] otal harmonic distortion THDi, rated power) [%]				
Grid frequency range [Hz] Total harmonic distortion THDi, rated power) [%] Power factor at rated power/ djustable power factor		45-55/5	5-65	
irid frequency range [Hz] otal harmonic distortion THDi, rated power) [%] Power factor at rated power/ Adjustable power factor	98.00/97.20	45-55/5 <3	5-65 to 0.8 lagging	//97.90
Grid frequency range [Hz] Total harmonic distortion THDi, rated power) [%] Power factor at rated power/ djustable power factor	98.00/97.20	45-55/5 <3 >0.99/0.8.leading	5-65 to 0.8 lagging	1/97.90
Grid frequency range [H2] Fotal harmonic distortion THDi, rated power) [%] Power factor at rated power/ Adjustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function	98.00/97.20	45-55/5 <3 >0.99/0.8.leading	5-65 to 0.8 lagging 98.40	1/97.90
irid frequency range [Hz] fotal harmonic distortion THDi, rated power) [%] Power factor at rated power/ djustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel***	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50	5-65 to 0.8 lagging 98.40 re mode	1/97.90
irid frequency range [Hz] otal harmonic distortion THDi, rated power) [%] ower factor at rated power/ djustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function arallel*** urge protection	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav	5-65 to 0.8 lagging 98.40 re mode and AC	1/97.90
Grid frequency range [H2] Fotal harmonic distortion THDi, rated power) [%] Power factor at rated power/ Adjustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel*** Surge protection Divervoltage category	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC	5-65 to 0.8 lagging 98.40 re mode and AC III AC	//97.90
irid frequency range [Hz] iotal harmonic distortion THDi, rated power) [%] Power factor at rated power/ djustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel*** Surge protection Divervoltage category Protective class	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC II DC and	5-65 to 0.8 lagging 98.40 re mode and AC III AC	//97.90
irid frequency range [Hz] total harmonic distortion THDi, rated power) [%] Power factor at rated power/ djustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel*** Surge protection Overvoltage category Protective class Grid monitoring	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC II DC and Class	5-65 to 0.8 lagging 98.40 ye mode and AC III AC 51	//97.90
Strid frequency range [H2] Strid frequency range [H2] Strid frequency range [H2] String rated power [%] String rated power factor String rated power factor String rated power factor String protection String	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC II DC and Class Yes	5-65 to 0.8 lagging 98.40 re mode and AC III AC ; 1	//97.90
	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Master-slav Type II, DC II DC and Class Yes Yes Yes	5-65 to 0.8 lagging 98.40 re mode and AC III AC ; I	//97.90
	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC II DC and Class Yes Yes	5-65 to 0.8 lagging 98.40 re mode and AC III AC ; I	//97.90
	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Master-slav Type II, DC II DC and Class Yes Yes Yes Yes	5-65 to 0.8 lagging 98.40 ve mode and AC III AC ; 1	//97.90
Sirid frequency range [H2] Social harmonic distortion THDi, rated power) [%] Power factor at rated power/ Adjustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Dearallel*** Surge protection Devervoltage category Protective class Social monitoring DC reverse polarity protection Solattery input reverse polarity protection Solatter	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Master-slav Type II, DC II DC and Class Yes Yes Yes Yes Yes	5-65 to 0.8 lagging 98.40 98.40 ve mode and AC III AC ; I	//97.90
	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Master-slav Type II, DC III DC and Class Yes Yes Yes Yes Yes Yes	5-65 to 0.8 lagging 98.40 98.40 ve mode and AC III AC i i	//97.90
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irid frequency range [H2] fotal harmonic distortion THDi, rated power) [%] Power factor at rated power/ dijustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Protection & Function Protection & General Protection & State Protection &	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC II DC and Class Yes Yes Yes Yes Yes Yes Yes Yes Yes	5-65 to 0.8 lagging 98.40 98.40 98.40 10 AC 11 AC 1	//97.90
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irid frequency range [Hz] otal harmonic distortion [HDi, rated power) [%] ower factor at rated power/ djustable power factor fficiency fax. efficiency/European efficiency [%] Protection & Function arallel*** urge protection wervoltage category rotective class rid monitoring Creverse polarity protection attery input reverse polarity protection sulation monitoring (LV) C short-circuit protection esidual current protection cc switch (PV) wer-heat protection FCI Seneral Data opology (PV/battery) regree of protection imensions (W*H*D) [mm]	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC II DC and Class Yes Yes Yes Yes Yes Yes Yes Yes Yes Y	5-65 to 0.8 lagging 98.40 98.40 98.40 98.40 98.40 10 AC 11 A	//97.90
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irid frequency range [H2] fortal harmonic distortion THDi, rated power) [%] Power factor at rated power/ dijustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel*** Burge protection Dervoltage category Protective class Grid monitoring DC reverse polarity protection Battery input reverse polarity protection nsulation monitoring (LV) AC short-circuit protection Sesidual current protection Coswitch (PV) Deer-heat protection Second Data Gropology (PV/battery) Degree of protection Dimensions (W*H*D) [mm] Veight [kg] Mounting method Deprating ambient temperature range [°C] Allowable relative humidity range Non-condensing) [%] Cooling method Max. operating altitude	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav 7ype II, DC II DC and Class Yes Yes Yes Yes Yes Yes Yes Yes Yes Y	5-65 to 0.8 lagging 98.40 98.40 98.40 98.40 98.40 10 AC 11 A	//97.90
irid frequency range [H2] for the transmit of the transmit of the transmit of the transmit of transm	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav 7ype II, DC II DC and Class Yes Yes Yes Yes Yes Yes Yes Yes Yes Y	5-65 to 0.8 lagging 98.40 98.40 98.40 98.40 98.40 10 AC 11 A	//97.90
Grid frequency range [H2] Fortal harmonic distortion THDi, rated power) [%] Prover factor at rated power/ Adjustable power factor Efficiency Aax. efficiency/European efficiency [%] Protection & Function Parallel*** Surge protection Overvoltage category Protective class Grid monitoring OC reverse polarity protection Battery input reverse polarity protection Residual current protection Ver-heat protection Oc switch (PV) Over-heat protection Objection Veright [kg] Aounting method Operating ambient temperature range [°C] Allowable relative humidity range Non-condensing) [%] Cooling method Aax. operating altitude Display Communication	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav 7ype II, DC II DC and Class Yes Yes Yes Yes Yes Yes Yes Yes Yes Y	5-65 to 0.8 lagging 98.40 98.40 98.40 98.40 98.40 10 AC 11 A	//97.90
Grid frequency range [H2] Fortal harmonic distortion THDi, rated power) [%] Prover factor at rated power/ Adjustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel*** Surge protection Overvoltage category Protective class Grid monitoring OC reverse polarity protection Battery input reverse polarity protection Residual current protection Ver-heat protection Oc switch (PV) Over-heat protection Objection (W*H*D) [mm] Veight [kg] Aounting method Operating ambient temperature range [*C] Nuovable relative humidity range Non-condensing) [%] Cooling method Aax. operating altitude Display Communication	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav 98.20/97.50 Master-slav Type II, DC II DC and Class Yes Yes Yes Yes Yes Yes Yes Y	5-65 to 0.8 lagging 98.40 98.40 98.40 98.40 98.40 10 AC 11 AC iii	<pre>//97.90</pre>
Grid frequency range [H2] Fortal harmonic distortion THDi, rated power) [%] Prover factor at rated power/ Adjustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel*** Surge protection Overvoltage category Protective class Grid monitoring OC reverse polarity protection Battery input reverse polarity protection Residual current protection Co Switch (PV) Over-heat protection Oc switch (PV) Operating ambient temperature range [°C] Allowable relative humidity range Non-condensing) [%] Cooling method Aax. operating altitude Display Communication Display	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav 7ype II, DC II DC and Class Class Yes Yes Yes Yes Yes Yes Yes Yes Yes OP Yes OP Transform IP66 450*550 31 Wall-mountin -25-60 (Deratin 0-10 Natural con 400 LED RS485/CAN	5-65 to 0.8 lagging 98.40 98.40 re mode and AC III AC iII AC iII AC iII AC iII a i i i i i i i i i i i i i i i i i i i	<pre>//97.90</pre>
Grid frequency range [H2] Fortal harmonic distortion THDi, rated power) [%] Power factor at rated power/ Adjustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function Parallel*** Surge protection Dervoltage category Protective class Grid monitoring DC reverse polarity protection Battery input reverse polarity protection Residual current protection Co Switch (PV) Deere of protection Sequence of protection Dimensions (W*H*D) [mm] Veight [kg] Aounting method Deperating ambient temperature range [*C] Klowable relative humidity range Non-condensing) [%] Cooling method Aax. operating altitude Display Communication D/DO DC connection type	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav Type II, DC II DC and Class (Class Yes Yes Yes Yes Yes Yes Yes Yes Yes OP Yes OP Transform IP69 450*550 31 Wall-mountin -25-60 (Deratir O-10 Natural con 400 LEC RS485/CAN	5-65 to 0.8 lagging 98.40 98.40 re mode and AC III	<pre>//97.90</pre>
irid frequency range [Hz] otal harmonic distortion THDi, rated power) [%] ower factor at rated power/ djustable power factor Efficiency Max. efficiency/European efficiency [%] Protection & Function arallel*** urge protection Overvoltage category rotective class irid monitoring Creverse polarity protection sultation monitoring (LV) cc short-circuit protection usulation monitoring (LV) cC switch (PV) Over-heat protection Segree of protection Dimensions (W*H*D) [mm] Veight [kg] Mounting method Operating ambient temperature range [°C] illowable relative humidity range Non-condensing) [%] cooling method Max. operating altitude Display communication	98.00/97.20	45-55/5 <3 >0.99/0.8.leading 98.20/97.50 Master-slav 7ype II, DC II DC and Class Class Yes Yes Yes Yes Yes Yes Yes Yes Yes OP Yes OP Transform IP66 450*550 31 Wall-mountin -25-60 (Deratin 0-10 Natural con 400 LED RS485/CAN	5-65 to 0.8 lagging 98.40 98.40 re mode and AC III	

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

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



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



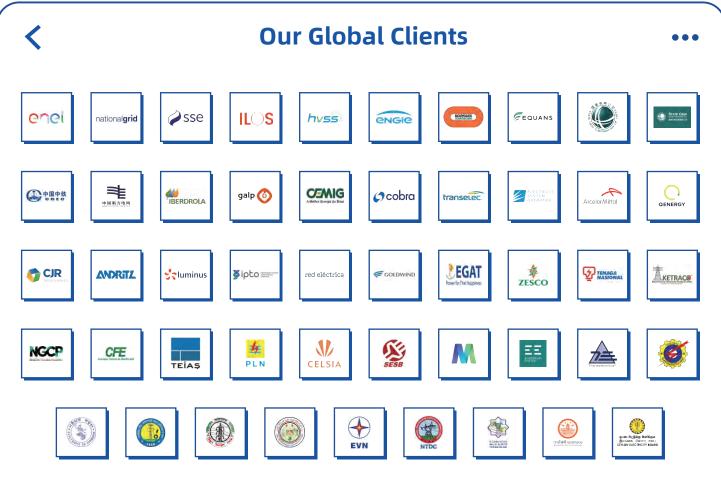
Sieyuan Utility Scale BESS



C&l and Residential BESS

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





Swatten Europe Case

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Swatten APAC Case



Compatible Battery Brand * For detailed list please contact our technical team EVF PYLONTECH מיא POWER CE HAME **Dyness** VESTWOODS FOLLOW US! 🖓 ñ O Facebook Linkedin YouTube