



Three Phase Hybrid Inverter (HV) (10-50) kW

Smarter Power Better Life



Three Phase Hybrid Inverter **10-50kW**

Modern farm



Rural school



Community hospital



More Powerful **200%**

Oversizing PV system

PV input power up to 60kW

More Reliable **55kW**

Max. output power for backup load during On-Grid mode

Supports **30** pcs

Supports 30 pcs in parallel with Master-Slave control, delivering up to 1500kW

More Flexible **6 PV Strings**

Divide the solar panels into up to six zones

Adapts to complex installation scenarios

More Extensive **100%**

Ensures all the energy supplied is green energy

Support fast Ac chargers and SG-ready heat pumps

More Intelligent **10ms**

Switching time with whole home backup

100% EPS output power (off grid mode)

Three Phase Hybrid Inverter (HV) (10-20) kW

Type Designation	SiH-10kW-TH-PRO		SiH- 15kW-TH	SiH-20kW-TH
PV (input)				
Max. recommended PV array power [Wp]	20000		30000	40000
Max. PV voltage [V]			1000	
Rated PV voltage [V]			650	
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 (input/output)				
Battery type			Li-ion battery	
Battery voltage range [V]			100-800	
Max. charge/discharge current* [A]			50/50	
Max. charge/discharge power [W]	15000/10000		30000/15000	30000/20000
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 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 (of rated power)			
Power factor at Rated power / Adjustable power factor	> 0.99 / 0.8 leading to 0.8 lagging			
Backup (output)				
Rated voltage [V]	3 / N / PE, 220 ; 230 ; 240			
Frequency range [Hz]	50 / 60			
Total harmonic distortion (THDv, rated power, Linear load) [%]	2			
Backup switching time [ms]	< 10			
Rated output power (off-grid mode) [VA]	10000		15000	20000
Peak output power (off-grid mode)**	16800 W / 168000 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			
Efficiency				
Max. efficiency/European efficiency [%]	98.0/97.5		98.1/97.6	
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 / Transformerless			
Degree of protection	IP66			
Dimensions (W*H*D) [mm]	615 * 465 * 255			
Weight [kg]	35		36.5	
Mounting method	Wall-mounting bracket			
Operating ambient temperature range [°C]	-25 to 60 (Derating above 45)			
Allowable relative humidity range (Non-condensing) [%]	0-100			
Cooling method	Natural convection			
Noise (Typical)	35 dB (A)			
Max. operating altitude [m]	2000			
Display	LED			
Communication	2*RS485, WLAN, 2*CAN			
DI/DO	4*DI, 2*DO, DRMO			
DC connection type	MC4 (PV, Max. 6 mm²)			
Battery connection type	MC4 (PV , Max.6mm²) Plug and play connector (battery , Max.10mm²)			
AC connection type	OT Terminals (grid / backup , Max.26mm²)			

* Depending on the connected battery

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

Three Phase Hybrid Inverter (HV) (25-50) kW

Type Designation	SiH-25kW-TH		SiH-30kW-TH		SiH-40kW-TH		SiH-50kW-TH	
PV (input)								
Max. recommended PV array power [Wp]	50000		60000					
Max. PV voltage [V]			1000					
Rated PV voltage [V]			650					
MPPT voltage range [V]			150-950					
No. of MPPT/Strings per MPPT			3 (2/2/2)					
Max. PV input current [A]			96 (32 / 32 / 32)					
Max. DC short-circuit current [A]			120 (40 / 40 / 40)					
Battery (input/output)								
Battery type	Li-ion battery							
Battery voltage range [V]	100-800							
Max. charge/discharge current* [A]			60/60				65/65	
Max. charge/discharge power [W]	30000 / 25000		30000 / 30000		40000 / 40000		50000 / 50000	
Grid (input/output)								
Max. AC power from grid	55000 W / 55000 VA							
Rated AC output power [VA]	25000		30000		40000		50000	
Max. AC output power [VA]	25000		30000		40000		50000	
Max. AC output current [A]	37.9		45.5		60.6		75.8	
Rated 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 (of rated power)							
Power factor at Rated power / Adjustable power factor	> 0.99 / 0.8 leading to 0.8 lagging							
Backup (output)								
Rated voltage [V]	3 / N / PE, 220 ; 230 ; 240							
Frequency range [Hz]	50 / 60							
Total harmonic distortion (THDv, rated power, Linear load) [%]	2							
Backup switching time [ms]	< 10							
Rated output power (off-grid mode) [VA]	25000		30000		40000		50000	
Peak output power (off-grid mode)**	36500 W / 36500 VA, 10s		45000 W / 45000 VA, 10s		60000 W / 60000 VA, 10s		70000 W / 70000 VA, 10s	
Max. output power (on-grid mode)	55000 W / 55000 VA							
Max. output current (on-grid mode) [A]	3*80							
Efficiency								
Max. efficiency/European efficiency [%]	98.2 / 97.8				98.2 / 97.9			
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 / Transformerless							
Degree of protection	IP66							
Dimensions (W*H*D) [mm]	615 * 465 * 255							
Weight [kg]	38				39.5		39.8	
Mounting method	Wall-mounting bracket							
Operating ambient temperature range [°C]	-25 to 60 (Derating above 45)							
Allowable relative humidity range (Non-condensing) [%]	0-100							
Cooling method	Fan cooling							
Noise (Typical)	55 dB (A)						60 dB (A)	
Max. operating altitude [m]	2000							
Display	LED							
Communication	2*RS485, WLAN, 2*CAN							
DI/DO	4*DI, 2*DO, DRM0							
DC connection type	MC4 (PV, Max. 6 mm²)							
Battery connection type	MC4 (PV , Max.6mm²) Plug and play connector (battery , Max.10mm²)							
AC connection type	OT Terminals (grid / backup , Max.26mm²)							

* Depending on the connected battery
** Can be reached only if PV and battery power is sufficient

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\$2.3 Billion

2023 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 7,832 employees
in 60+ countries and regions

1,000kV

Full range product: 10kV -1,000kV

esGrid

Grid-level energy storage

Sieyuan Utility Scale BESS



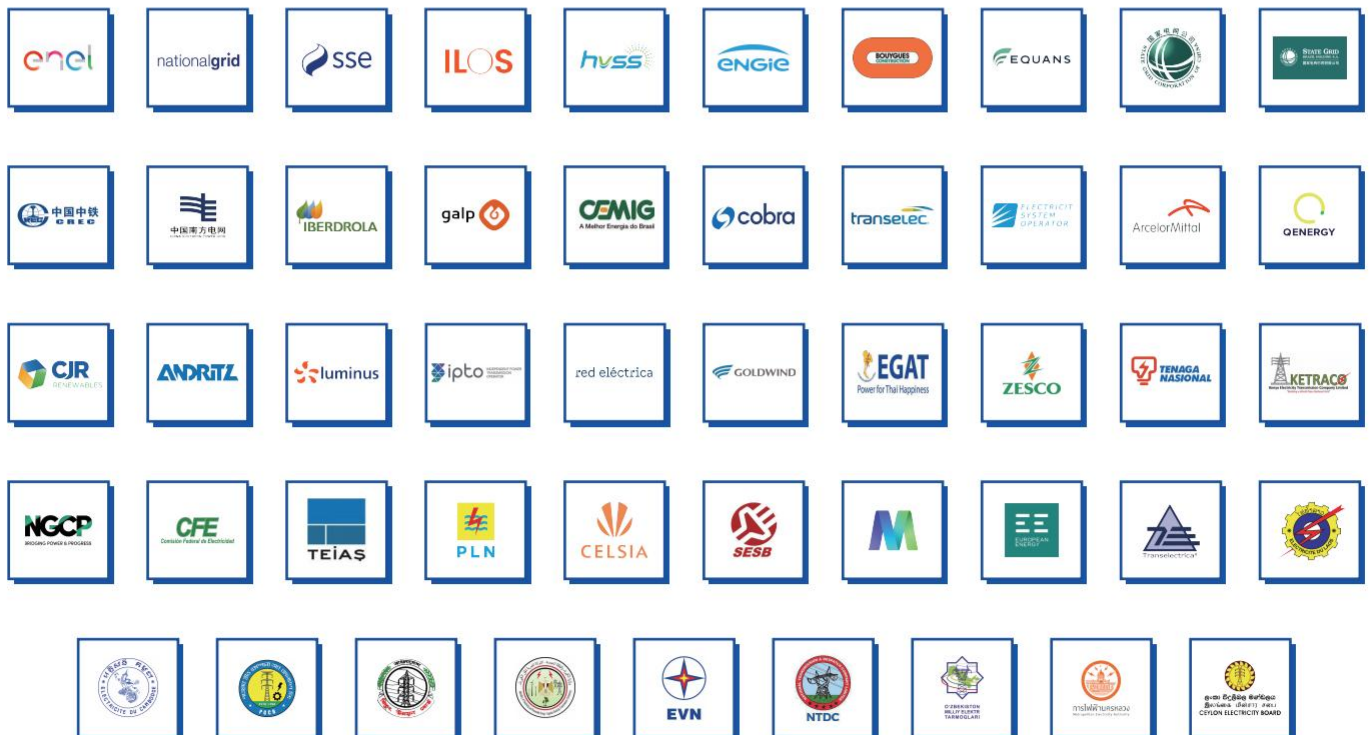
Residential storage solution



Global Marketing & Service Layout



Our Global Clients

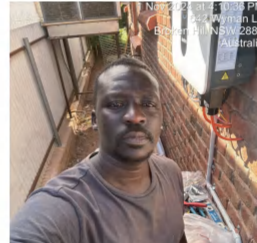




Swatten Europe Case



Swatten APAC Case



Compatible Battery Brand

* For detailed list please contact our technical team



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