



Single Phase Hybrid Inverter (HV) (8/10) kW

Smarter Power Better Life



KEY FEATURES



50v

Low starting voltage

200%

Max. DC input oversizing

4MPPT

Max. 16A DC input

10kw

Max. charge/discharge power

14.5kw

Rated output power

4000m

Max. operating altitude



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Type Designation	SiH-8kW-SH	SiH-10kW-SH
PV (input)		
Max. recommended PV array power [Wp]	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	4 (1/1/1/1)	
Max. PV input current [A]	64 (16/16/16/16)	
Max. DC short-circuit current [A]	80 (20/20/20/20)	
Max. current for each input connector [A]	20	
Battery (input/output)		
Battery type	Li-ion battery	
Battery voltage range [V]	80-460	
Max. charge/discharge current [A]	50/50	
Max. charge/discharge power [W]	10000/10000	
Backup Output (On-Grid Mode)		
Rated output power [W]	14500	
Rated output current [A]	63	
Backup Output (Off-Grid Mode)		
Rated output power	8000 W/8000 VA	9999 W/9999 VA
Peak output power	13680 VA, 10s	
Backup switching time [ms]	<10	
Rated voltage [V]	220/230/240 (±2 %)	
Frequency range [Hz]	50/60 (±2 %)	
Total harmonic distortion (THDv, rated power, linear load) [%]	≤2	
Grid (input/output)		
Max. AC input power from grid [VA]	14500	
Rated AC output power [W]	8000	9999
Max. AC output power [VA]	8000	9999
Max. AC output current [A]	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) [%]	<3	
Power factor at rated power	>0.99	
Adjustable power factor	adj. 0.8 leading to 0.8 lagging	
Efficiency		
Max. efficiency/European efficiency [%]	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	
Dimensions (W*H*D) [mm]	599*490*177	
Weight [kg]	≤29	
Mounting method	Wall-mounting bracket	
Operating ambient temperature range [°C]	-25-60	
Allowable relative humidity range [%]	0-100	
Cooling method	Natural convection	
Max. operating altitude [m]	4000	
Display	LED	
Communication	RS485/CAN/WLAN	
DI/DO	1*DI / 2*DO/ DRM	
DC connection type	MC4	
Battery connection type	MC4	
AC connection type	Screws & Fasteners	

About swatten

Full Range From Power Generation,
Transmission, Distribution To

Energy Storage

32 years

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

GLOBAL OPERATIONS

International engineering, manufacturing
and technical service capabilities

US\$3.2 Billion

2024 Turnover

1400+

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

GLOBAL EXPERTISE

Power conversion, energy storage
and grid-support solutions

22

22 Manufacturing bases

100+

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

1,000kV

Full range product: 10kV -1,000kV

GLOBAL ENERGY STORAGE

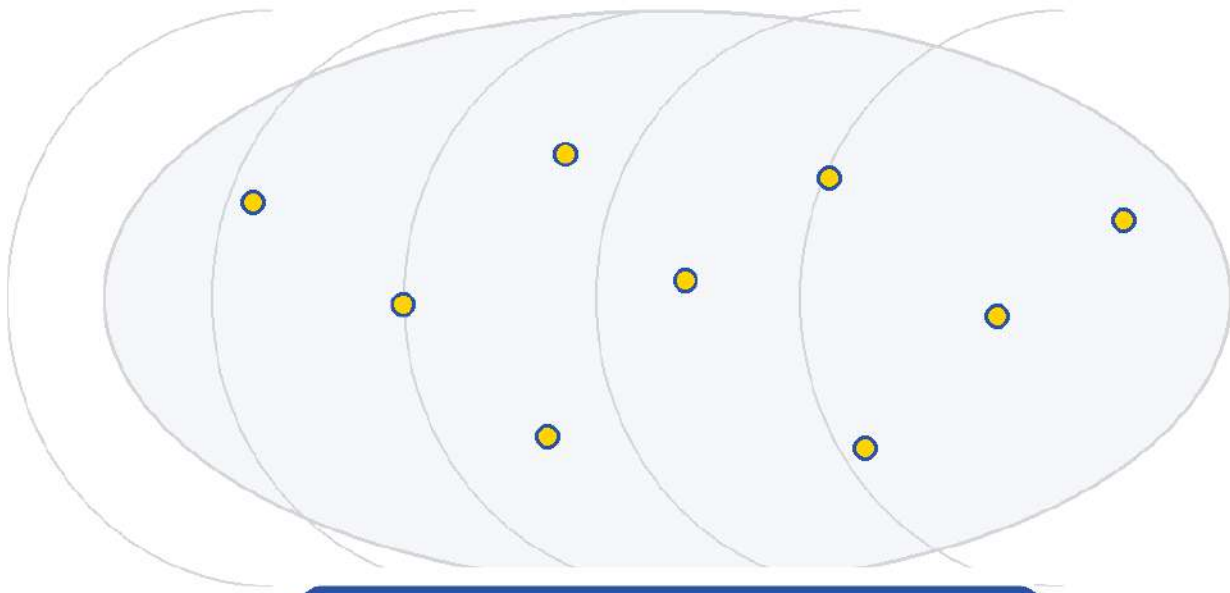
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Regional service and after-sales coverage

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Commercial & Industrial

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Residential

Solar self-consumption and backup power

Agriculture

Reliable power for farms and remote sites

Infrastructure

Power quality and continuity

Energy Partners

OEM, EPC and distribution support



Swatten Europe Case



Swatten APAC Case



Battery Compatibility

Compatible high-voltage battery options are available for global markets. Contact the technical team for the current approved compatibility list.

[Global Compatibility](#)

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