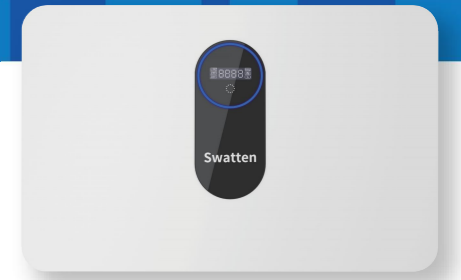


# H1 Series

Single Phase Hybrid Inverter (LV)



## KEY FEATURES

### OUTSTANDING PERFORMANCE

- **42~59V** wide battery voltage range
- **Max. 5kW** charging and discharging
- **240%** DC input oversizing
- **50V** extra low start-up voltage

### FLEXIBLE APPLICATION

- Support multi-parallel connection
- Equipped with DI/DO port
- **Max. 16A** DC input

### INTELLIGENT MULTIPLE OPERATING MODES AVAILABLE

- Self-generated, zero power feeder, VPP, battery-free, battery-free & gridless

### SUPERB OFF-GRID LOAD

- Whole-home backup
- Support half-wave load and shock load
- **< 10ms** off-grid switching

### FRIENDLY DESIGN

- Die-casting design, fanless design, low noise
- Support AFCI
- Remote troubleshooting and program upgrading

# H1 Series

Single Phase Hybrid Inverter (LV)

## Technical data

Type Designation	SiH-3.6kW-SL	SiH-5kW-SL	SiH-6kW-SL
<b>Input (DC)</b>			
Recommend max. PV input power	8700 Wp	10000 Wp	11000 Wp
Max. PV input voltage	600V	600V	600V
Min. operating PV voltage	40V	40V	40V
Start-up input voltage	50V	50V	50V
Rated PV input voltage	360V	360V	360V
MPPT Voltage Range	40-560V	40-560V	40-560V
No. of independent MPPT inputs	2	2	2
Default No. of PV strings per MPPT	1	1	1
Max. PV input current	16A	16A	16A
Max. DC short-circuit current	20A	20A	20A
<b>Input/Output (AC)</b>			
Max. AC input power from grid	8700 VA	10000 VA	11000 VA
Rated AC output power	3680 W	5000 W	6000 W
Max. AC output power	3680 VA	5000 VA	6000 VA
Max. AC output current	16.7A	22.8 A	27.3 A
Rated AC voltage	220V/230V/240V	220V/230V/240V	220V/230V/240V
AC voltage range	154V~276V	154V~276V	154V~276V
Rated grid frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Grid frequency range	45~55Hz/55~65Hz	45~55Hz/55~65Hz	45~55Hz/55~65Hz
Harmonic (THD)	< 3%	< 3%	< 3%
Power factor at rated power	> 0.99	> 0.99	> 0.99
Adjustable power factor	adj.0.8. overexcited/leading to 0.8 underexcited/lagging	adj.0.8. overexcited/leading to 0.8 underexcited/lagging	adj.0.8. overexcited/leading to 0.8 underexcited/lagging
Grid Type	Single phase	Single phase	Single phase
<b>Efficiency</b>			
Max. efficiency	97.5%	97.7%	97.7%
European efficiency	97%	97.3%	97.3%
<b>Protection&amp;Function</b>			
Grid monitoring	Yes	Yes	Yes
DC reverse polarity protection	Yes	Yes	Yes
AC short circuit protection	Yes	Yes	Yes
Leakage current protection	Yes	Yes	Yes
Surge Protection	DC type II / AC type II	DC type II / AC type II	DC type II / AC type II
DC switch(PV)	Yes	Yes	Yes
DC fuse(battery)	Yes	Yes	Yes
Battery input reverse polarity protection	Yes	Yes	Yes
<b>Battery Data</b>			
Battery Type	Li-ion battery	Li-ion battery	Li-ion battery
Battery voltage	42-59V	42-59V	42-59V
Max. charge current	100 A	100 A	100 A
Max. discharge current	100 A	100 A	100 A
Max. charge power	5000 W	5000 W	5000 W
Max. discharge power	5000 W	5000 W	5000 W
<b>General Data</b>			
Dimensions (W*H*D)	600*365*194mm	600*365*194mm	600*365*194mm
Weight	≤23.5kg	≤23.5kg	≤23.5kg
Mounting method	Wall-mounting bracket	Wall-mounting bracket	Wall-mounting bracket
Topology	Transformerless	Transformerless	Transformerless
Degree of protection	Ip65	Ip65	Ip65
Operating ambient temperature range	-25°C~60°C	-25°C~60°C	-25°C~60°C
Allowable relative humidity range	0~100%	0~100%	0~100%
Cooling method	Natural convection	Natural convection	Natural convection
Max. operating altitude	4000m	4000m	4000m
Display	LED indicator	LED indicator	LED indicator
Communication	RS485/CAN/WLAN	RS485/CAN/WLAN	RS485/CAN/WLAN
DI/DO	DI×1/DO×1/DRM	DI×1/DO×1/DRM	DI×1/DO×1/DRM
DC connection type	MC4	MC4	MC4
Battery connection type	Screws & Fasteners	Screws & Fasteners	Screws & Fasteners
AC connection type	Screws & Fasteners	Screws & Fasteners	Screws & Fasteners
<b>Backup Data(on-grid)</b>			
Rated output power for backup load	6000 W	6000 W	6000 W
Rated output current for backup load	27A	27A	27A
<b>Backup Data(off-grid model)</b>			
Rated voltage	220V/230V/240V(±2%)	220V/230V/240V(±2%)	220V/230V/240V(±2%)
Frequency range	50Hz/60Hz(±0.5%)	50Hz/60Hz(±0.5%)	50Hz/60Hz(±0.5%)
Total output THDV for liner load	≤2%	≤2%	≤2%
Switch time to emergency mode	≤10 ms	≤10 ms	≤10 ms
Rated output power	3680 W / 3680 VA	5000 W / 5000 VA	5000 W / 6000 VA
Peak output power	8400 VA, 10s	8400 VA, 10s	8400 VA, 10s