



- MAX 97.6% EFFICIENCY
- IP66 PROTECTION

### STH 3~10kW

Single Phase | Hybrid inverter (LV)



Max. efficiency up to 97.6%



With AC output ranging from 3kW to 10kW



Powerful load adaptability, support loads stable access



Fast and easy data checking and commissioning via App or OLED display



Fast charging/discharging of up to 190A to meet the demand of higher consumption and energy trading.



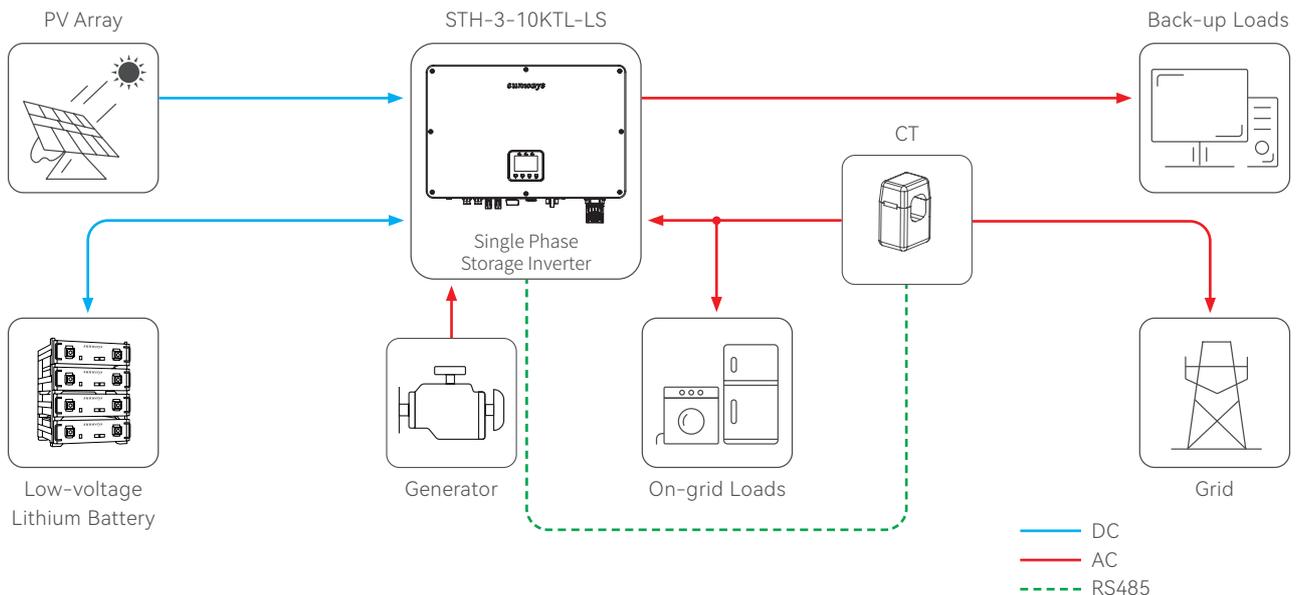
Up to 18A maximum PV input current allows most higher current PV panels connection and lowers the system LCOE.



Uninterruptible power supply, switch to off-grid mode within 10ms



Support Diesel Generator



Model		STH-3KTL -LSS	STH-3.6KT L-LS	STH-4.2KTL -LS	STH-4.6KTL -LS	STH-5KTL -LS	STH-6KTL -LS	STH-7KTL -LS	STH-8KTL -LS	STH-10KTL -LS
PV Input	Start-up Voltage (V)	160	160	160	160	160	160	160	160	160
	Max. DC Input Voltage (V)	600	600	600	600	600	600	600	600	600
	Rated DC Input Voltage (V)	360	360	360	360	360	360	360	360	360
	MPPT Voltage Range (V)	160-550	160-550	160-550	160-550	160-550	160-550	160-550	160-550	160-550
	No. of MPP Trackers	1	2	2	2	2	2	2	2	2
	No. of DC Inputs per MPPT	1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
	Max. Input Current (A)	18	18/18	18/18	18/18	18/18	18/18	18/18	18/18	18/18
Max. Short-circuit Current (A)	22	22/22	22/22	22/22	22/22	22/22	22/22	22/22	22/22	
Battery	Battery Type	Lithium battery or lead-acid battery								
	Battery Communication Mode	CAN / RS485								
	Battery Voltage Range (V)	42-58								
	Max. Charge/Discharge Current (A)	100/100	100/100	100/100	100/100	100/100	120/120	150/150	190/190	190/190
Rated Current Of Built-in Fuse (A)	150	150	150	150	150	150	300	300	300	
Output (Grid)	Rated Output Power (W)**	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000	10,000
	Max. Output Power (W)	3,300	3,960	4,600	5,060	5,500/4,990 <sup>①</sup>	6,600	7,700	8,800	11,000
	AC output rated apparent power (VA)	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000	10,000
	Max. Apparent Power (VA)	3,300	3,960	4,600	5,060	5,500/4,990 <sup>①</sup>	6,600	7,700	8,800	11,000
	Max. Input Apparent Power (VA)	6,000 <sup>②</sup>	7,200 <sup>②</sup>	8,400 <sup>②</sup>	9,200 <sup>②</sup>	10,000 <sup>②</sup>	12,000 <sup>②</sup>	12,000 <sup>②</sup>	12,000 <sup>②</sup>	12,000 <sup>②</sup>
	Rated Output Voltage (V)**	L/N/PE, 220/230V								
	Rated AC Frequency (Hz)	50/60								
	AC output rated current (A)	13	15.7	18.3	20	21.7	26.1	31	35	44
	Max. Output Current (A)	15	18	20	22	25/21.7 <sup>①</sup>	28.7	34	38.3	48
	Maximum output overcurrent protection (A)	50	50	50	50	50	80	80	80	80
	Power Factor	0.8 leading...0.8 lagging								
	Max. Total Harmonic Distortion	<3% @Rated Output Power								
DCI	<0.5%In									
Output (Back-up)	Rated Output Power (W)	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000	10,000
	Max. Output Power (W)	3,300	3,960	4,600	5,060	5,500/4,990 <sup>①</sup>	6,600	7,700	8,800	11,000
	Back-up output rated apparent power (VA)	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000	10,000
	Max. Apparent Power (VA)	3,300	3,960	4,600	5,060	5,500/4,990 <sup>①</sup>	6,600	7,700	8,800	11,000
	Back-up output rated current (A)	13	15.7	18.3	20	21.7	26.1	31	35	44
	Max. Output Current (A)	15	18	20	22	25/21.7 <sup>①</sup>	28.7	34	38.3	48
	UPS switching time	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms	<10ms
	Rated Output Voltage (V)	L/N/PE, 220/230V								
	Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Peak output apparent power (VA)	3,900 <sup>③</sup> , 60s	4,700 <sup>③</sup> , 60s	5,500 <sup>③</sup> , 60s	6,000 <sup>③</sup> , 60s	6,500 <sup>③</sup> , 60s	7,800 <sup>③</sup> , 60s	9,100 <sup>③</sup> , 60s	10,000 <sup>③</sup> , 60s	13,000 <sup>③</sup> , 60s	
Voltage harmonic distortion	<3% @Linear load									
Efficiency	Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
	European Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
	Battery Charged by PV Max. Efficiency	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%	98.0%
	Battery Charged by AC Max. Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%
	Max battery discharge conversion efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%

Protection		General Data	
DC Reverse Polarity Protection	Integrated	Dimensions (mm)	640W*430H*202D
Battery Input Reverse Connection Protection	Integrated	Weight (kg)	34
Insulation Resistance Protection	Integrated	Protection Degree	IP66
DC Switch	Optional	Self-consumption at Night (W)	< 15
Surge Protection	Integrated	Topology	Transformerless
Over-temperature Protection	Integrated	Operating Temperature Range (°C)	-30~60
Residual Current Protection	Integrated	Relative Humidity (%)	0~100
Anti-islanding Protection	Frequency Shift, Integrated	Operating Altitude (m)	4000 (derating@ > 3000)
AC Over-voltage Protection	Integrated	Cooling	Natural Convection
Overload Protection	Integrated	Noise Level (dB)	< 50
AC Short-circuit Protection	Integrated	Display	TFT3.5 LCD/ OLED
		Communication	WiFi/GPRS/LAN(Optional)

### Compliance

CEI-021, NRS097, EN61000, IEC62109

① The grid feed in power for AS/NZS 4777.2 is limited 4.99kW & 4.99kVA & 21.7A.

② Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery.

③ The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is relating to the overload power.

\*\* Due to differences in voltage values in various countries, minor variations may occur. The final interpretation rights belong to Sunways.