

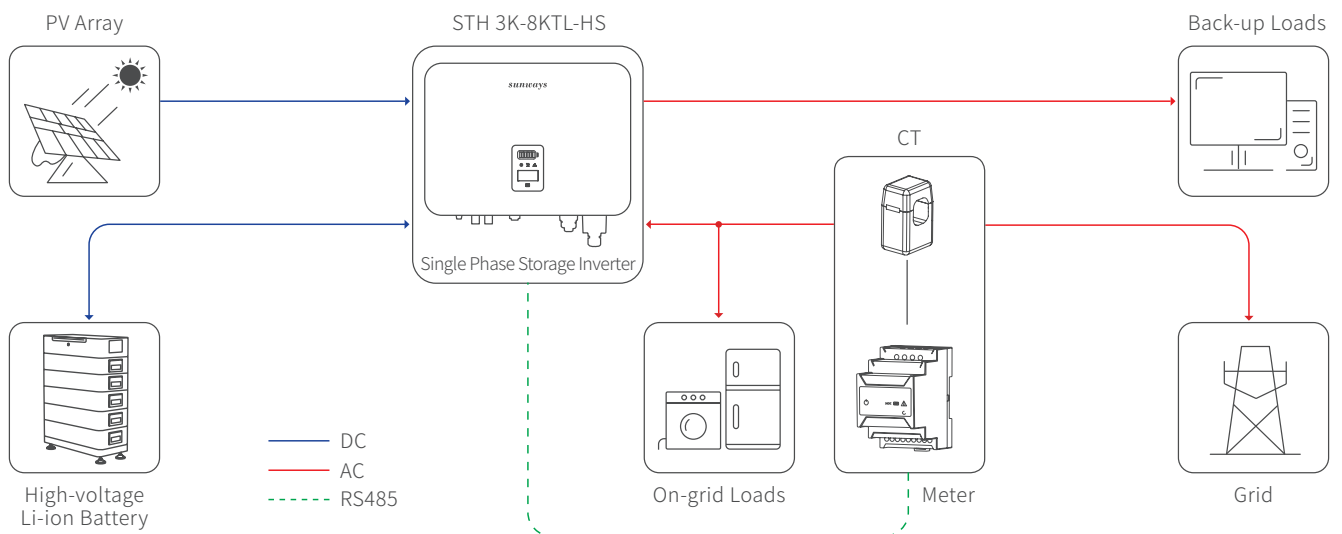
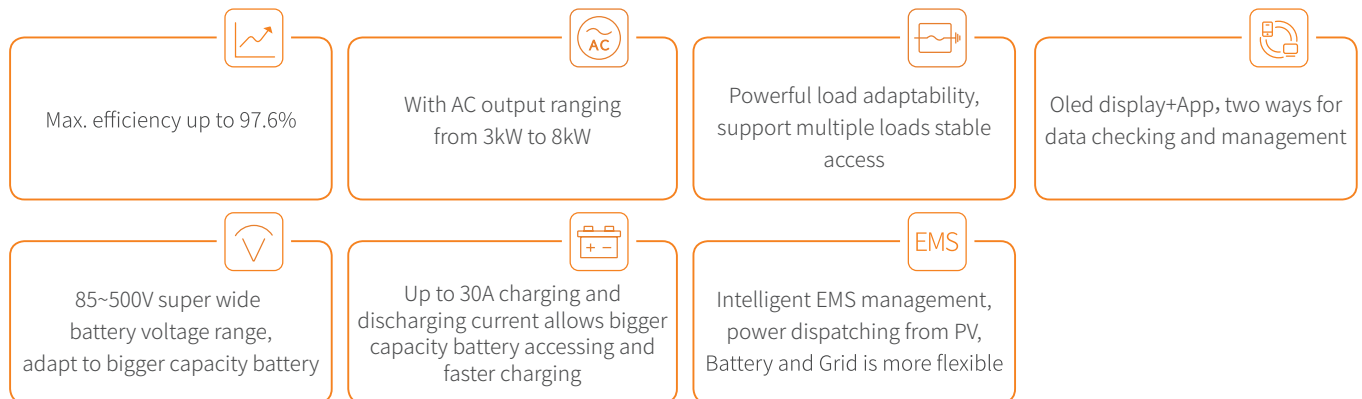
# sunways

Sunways Single Phase Storage Inverter

STH-3K~8KTL

MAX 97.6% EFFICIENCY

IP65 PROTECTION



Model	STH-3KTL-HSS	STH-3.6KTL-HSS	STH-3KTL-HS	STH-3.6KTL-HS	STH-4.2KTL-HS	STH-4.6KTL-HS	STH-5KTL-HS	STH-6KTL-HS	STH-7KTL-HS	STH-8KTL-HS	
PV Input	Max. Input Power (W)	3,900	4,680	3,900	4,680	5,460	5,980	6,500	7,800	9,100	10,400
	Start-up Voltage (V)	80	80	80	80	80	80	80	80	80	80
	Min DC Voltage(V)	65	65	65	65	65	65	65	65	65	65
	Max. DC Input Voltage (V)	600	600	600	600	600	600	600	600	600	600
	Rated DC Input Voltage (V)	360	360	360	360	360	360	360	360	360	360
	MPPT Voltage Range (V)	100-550	100-550	100-550	100-550	100-550	100-550	100-550	100-550	100-550	100-550
	No. of MPP Trackers	1	1	2	2	2	2	2	2	2	2
	No. of PV Inputs per MPPT	1	1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1
	Max. Input Current (A)	15	15	15/15	15/15	15/15	15/15	15/15	15/15	15/15	15/15
	Max. Short-circuit Current (A)	20	20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20
Battery	Battery Type	Lithium Battery (with BMS)									
	Battery Communication Mode	CAN / RS485									
	Battery Voltage Range (V)	85-500									
	Max. Charge/Discharge Current (A)	30/30									
	Rated Current of Built-in Fuse (A)	63									
Output (Grid)	Rated Output Power (W)	3,000	3,600	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000
	Max. Output Power (W)	3,300	3,960	3,300	3,960	4,600	4,600	5,500/4,990 <sup>①</sup>	6,600	7,700	8,000
	Rated Apparent Power (VA)	3,000	3,600	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000
	Max. Apparent Power (VA)	3,300	3,960	3,300	3,960	4,600	4,600	5,500/4,990 <sup>①</sup>	6,600	7,700	8,000
	Max. Input Apparent Power (VA)	6,000 <sup>②</sup>	7,200 <sup>②</sup>	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>
	Max. Charging Power of Battery (W)	3,000	3,600	3,000	3,600	4,200	4,600	5,000	6,000	7,000	8,000
	Rated Output Voltage (V)	L/N/PE, 220/230/240V									
	Rated AC Frequency (Hz)	50/60									
	AC output rated current (A)	13	15.7	13	15.7	18.3	20	21.7	26.1	31.8	36.3
	Max. Output Current (A)	15	18	15	18	21	21	25/21.7 <sup>①</sup>	28.7	35	36.3
	Power Factor	0.8 leading ... 0.8 lagging									
	Max. Total Harmonic Distortion	<3% @Rated Output Power									
	DCI	<0.5%In									
Output (Back-up)	UPS Switching Time	< 10ms									
	Rated Output Power (W)	3,000	3,600	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000
	Max. Output Power (W)	3,300	3,960	3,300	3,960	4,600	4,600	5,500/4,990 <sup>①</sup>	6,600	7,700	8,000
	Rated Apparent Output Power (VA)	3,000	3,600	3,000	3,600	4,200	4,600	5,000/4,990 <sup>①</sup>	6,000	7,000	8,000
	Max. Apparent Output Power (VA)	3,300	3,960	3,300	3,960	4,600	4,600	5,500/4,990 <sup>③</sup>	8,800	11,000	13,200
	Peak Output Apparent Power (VA)	3,900 <sup>③</sup> , 60s	4,700 <sup>③</sup> , 60s	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
	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%	97.6%
	European Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
	Max. Battery Charging Conversion Efficiency	96.6%	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%	96.6%

Protection	
DC Reverse Polarity Protection	Integrated
Battery Input Reverse Connection Protection	Integrated
Insulation Resistance Protection	Integrated
DC Switch	Integrated
Surge Protection	Integrated
Over-temperature Protection	Integrated
Residual Current Protection	Integrated
Islanding Protection	Frequency Shift, Integrated
AC Over-voltage Protection	Integrated
Overload Protection	Integrated
AC Short-circuit Protection	Integrated

General Data	
Over Voltage Category	PV: II ; Main: III
Dimensions (mm)	550W*410H*175D
Weight (kg)	26
Protection Degree	IP65
Self-consumption at Night (W)	< 15
Topology	Transformer less
Operating Temperature Range (° C)	-30~60
Relative Humidity (%)	0~100
Operating Altitude (m)	3000
Cooling	Natural Convection
Noise Level (dB)	< 25
Display	OLED & LED
Communication	WiFi / LAN (Optional)
Protective Class	Class 1

**Compliance**  
IEC621109, IEC62116, VDE4105, VDE0126, AS4777, RD1699, NBR16149, IEC61727, IEC60068, IEC61683, EN50549, EN61000

**Country Of Manufacturer**  
China

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.