

sunways

Sunways Three Phase with Dual MPPT

STT-4K~25KTL-P

MAX 98.6% EFFICIENCY

IP65 PROTECTION



SAFE & RELIABLE

- High reliability due to good heat dissipation design
- Integrated lightning protection for both DC and AC
- Adapt to complex power grid
- High anti-corrosion ability with aluminum alloy die casting technology
- Wider working temperature and altitude, adapt to various installation environments



HIGH YIELD

- High yield with Max. 98.6% efficiency
- European weighted efficiency 98.2%
- Longer working hours due to the lower start-up voltage and wider MPPT range
- Up to 10% continuous output overloading capacity
- With a max input current of 15A, compatible with high-power panels



EASY TO USE

- Support wireless and wired internet connection (RS485, WiFi/GPRS/LAN optional)
- Remote upgrading available
- Fast and easy configuration via App or OLED display

Model	STT-4KTL-P	STT-5KTL-P	STT-6KTL-P	STT-8KTL-P	STT-10KTL-P	STT-12KTL-P	STT-15KTL-P	STT-17KTL-P	STT-20KTL-P	STT-25KTL-P
Input										
Max. Input Power (W)	6,400	8,000	9,600	12,800	16,000	19,200	24,000	27,200	32,000	40,000
Start-up Voltage (V)	180	180	180	180	180	180	180	180	180	180
Min. DC Voltage (V)	150	150	150	150	150	150	150	150	150	150
Max. DC Input Voltage (V)	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Rated DC Input Voltage (V)	620	620	620	620	620	620	620	620	620	620
MPPT Voltage Range (V)	160-1000	160-1000	160-1000	160-1000	160-1000	160-1000	160-1000	160-1000	160-1000	160-1000
No. of MPP Trackers	2	2	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	1/2	2/2	2/2	2/2
Max. Input Current (A)	15/15	15/15	15/15	15/15	15/15	15/15	15/30	30/30	30/30	30/30
Max. Short-circuit Current (A)	20/20	20/20	20/20	20/20	20/20	20/20	20/40	40/40	40/40	40/40
Output										
Rated Output Power (W)	4,000	5,000	6,000	8,000	10,000	12,000	15,000	17,000	20,000	25,000
Max. Output Power (W)	4,400	5,500	6,600	8,800	11,000	13,200	16,500	18,700	22,000	25,000
Max. Apparent Power (VA)	4,400	5,500	6,600	8,800	11,000	13,200	16,500	18,700	22,000	25,000
Rated Output Voltage (V)	3L/N/PE, 230/400V									
Rated AC Frequency (Hz)	50/60Hz 45-55Hz/55-65Hz									
Max. Output Current (A)	6.7	8.4	10	13.3	16.5	20	25	28.4	31.9	39
Power Factor	0.8 leading ...0.8 lagging									
Max. Total Harmonic Distortion	< 3% @Rated Output Power									
DCI	< 0.5%In									
Efficiency										
Max. Efficiency	98.1%	98.1%	98.3%	98.3%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%
European Efficiency	97.9%	97.9%	98.0%	98.0%	98.2%	98.2%	98.2%	98.2%	98.2%	98.2%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Protection										
DC Reverse Polarity Protection	Integrated									
Insulation Resistance Protection	Integrated									
DC Switch	Optional									
Surge Protection	Integrated									
Over-temperature Protection	Integrated									
Residual Current Protection	Integrated									
Anti-islanding Protection	Integrated									
AC Short-circuit Protection	Integrated									
AC Over-voltage Protection	Integrated									
General Data										
Dimensions (mm)	550W*410H*175D									
Weight (KG)	23						26	29		
Protection Degree	IP65									
Self-consumption at Night (W)	< 1									
Topology	Transformer less									
Operating Temperature Range (° C)	-30~60									
Relative Humidity (%)	0~100									
Operating Altitude (m)	4000 (derating@ > 3000)									
Cooling	Natural Convection							Smart Fan Cooling		
Noise Level (dB)	< 25							< 40		
Display	OLED & LED									
Communication	RS485, WiFi/GPRS/LAN (Optional)									
Compliance	NB/T32004、IEC62109、IEC62116、VDE4105、VDE0126、UTE C15-712-1、AS4777、C10/11、CEI0-21、RD1699、NBR16149、IEC61727、IEC60068、IEC61683、EN50549、EN61000									

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IP65 PROTECTION



Safe & Reliable

- High reliability due to good heat dissipation design
- IP65, wider working temperature and altitude, adapt to various installation environments
- Integrated lightning protection for both DC and AC
- Adapt to complex power grid
- High anti-corrosion ability with aluminum alloy die casting technology



High Revenue

- High yield with Max. 98.6% efficiency
- European weighted efficiency 98.2%
- Longer working hours due to the lower start-up voltage and wider MPPT range
- Up to 10% continuous output overloading capacity
- Dual MPPT design with precise MPPT algorithm



Easy to use

- Compact elegant design, less than 25kg, easy for installation
- Support wireless and wired internet connection (RS485, Wi-Fi/GPRS/LAN optional)
- Remote upgrading available
- Intelligent positioning abnormal string with integrated I/V scan function

TECHNICAL PARAMETERS

THREE PHASE:STT-4K/5K/6K/8K/10K/12K/15K/17K/20K/25KTL

Model	STT-4KTL	STT-5KTL	STT-6KTL	STT-8KTL	STT-10KTL	STT-12KTL	STT-15KTL	STT-17KTL	STT-20KTL	STT-25KTL
Input										
Max. Input Power (W)	6,000	7,500	9,000	12,000	15,000	18,000	22,500	25,500	30,000	37,500
Start-up Voltage (V)	200	200	200	200	200	200	200	200	200	200
Min. DC Voltage (V)	150	150	150	150	150	150	150	150	150	150
Max. DC Input Voltage (V)	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Rated DC Input Voltage (V)	620	620	620	620	620	620	620	620	620	620
MPPT Voltage Range (V)	200-950	200-950	200-950	200-950	200-950	200-950	200-950	200-950	200-950	200-950
No. of MPP Trackers	2	2	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	1/2	2/2	2/2	2/2
Max. Input Current (A)	11/11	11/11	11/11	11/11	11/11	11/11	11/22	22/22	22/22	22/22
Max. Short-circuit Current (A)	15/15	15/15	15/15	15/15	15/15	15/15	15/30	30/30	30/30	30/30
Output										
Rated Output Power (kW)	4	5	6	8	10	12	15	17	20	25
Max. Output Power (kW)	4.4	5.5	6.6	8.8	11	13.2	16.5	18.7	22	25
Max. Apparent Power (kVA)	4.4	5.5	6.6	8.8	11	13.2	16.5	18.7	22	25
Rated Output Voltage (V)	3L/N/PE, 230/400V									
Rated AC Frequency (Hz)	50/60Hz 45-55Hz/55-65Hz									
Max. Output Current (A)	6.7	8.4	10	13.3	16.5	20	25	28.4	31.9	39
Power Factor	0.8 leading ∙∙0.8 lagging									
Max. Total Harmonic Distortion	< 3% @Rated Output Power									
DCI	< 0.5%In									
Efficiency										
Max. Efficiency	98.1%	98.1%	98.3%	98.3%	98.6%	98.6%	98.6%	98.6%	98.6%	98.6%
European Efficiency	97.9%	97.9%	98.0%	98.0%	98.2%	98.2%	98.2%	98.2%	98.2%	98.2%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Protection										
DC Reverse Polarity Protection	Integrated									
Insulation Resistance Protection	Integrated									
DC Switch	Optional									
Surge Protection	Integrated (Type II)									
Over-temperature Protection	Integrated									
Residual Current Protection	Integrated									
Anti-islanding Protection	Integrated									
AC Short-circuit Protection	Integrated									
AC Over-voltage Protection	Integrated									
General Data										
Dimensions (mm)	550W*410H*175D									
Weight (kg)	22						25			
Protection Degree	IP65									
Self-consumption at Night (W)	< 1									
Topology	Transformer-less									
Operating Temperature Range (° C)	-30~60°C									
Relative Humidity	0~100%									
Operating Altitude (m)	4000 (derating@ > 3000)									
Cooling	Natural Convection							Smart Fan Cooling		
Noise Level (dB)	< 25						< 40			
Display	OLED & LED									
Communication	RS485, WiFi/GPRS/LAN (Optional)									
Compliance	NB/T32004、IEC62109、IEC62116、VDE4105、VDE0126、UTE C15-712-1、AS4777、C10/11、CEI0-21、RD1699、NBR16149、IEC61727、IEC60068、IEC61683、EN50549、EN61000									