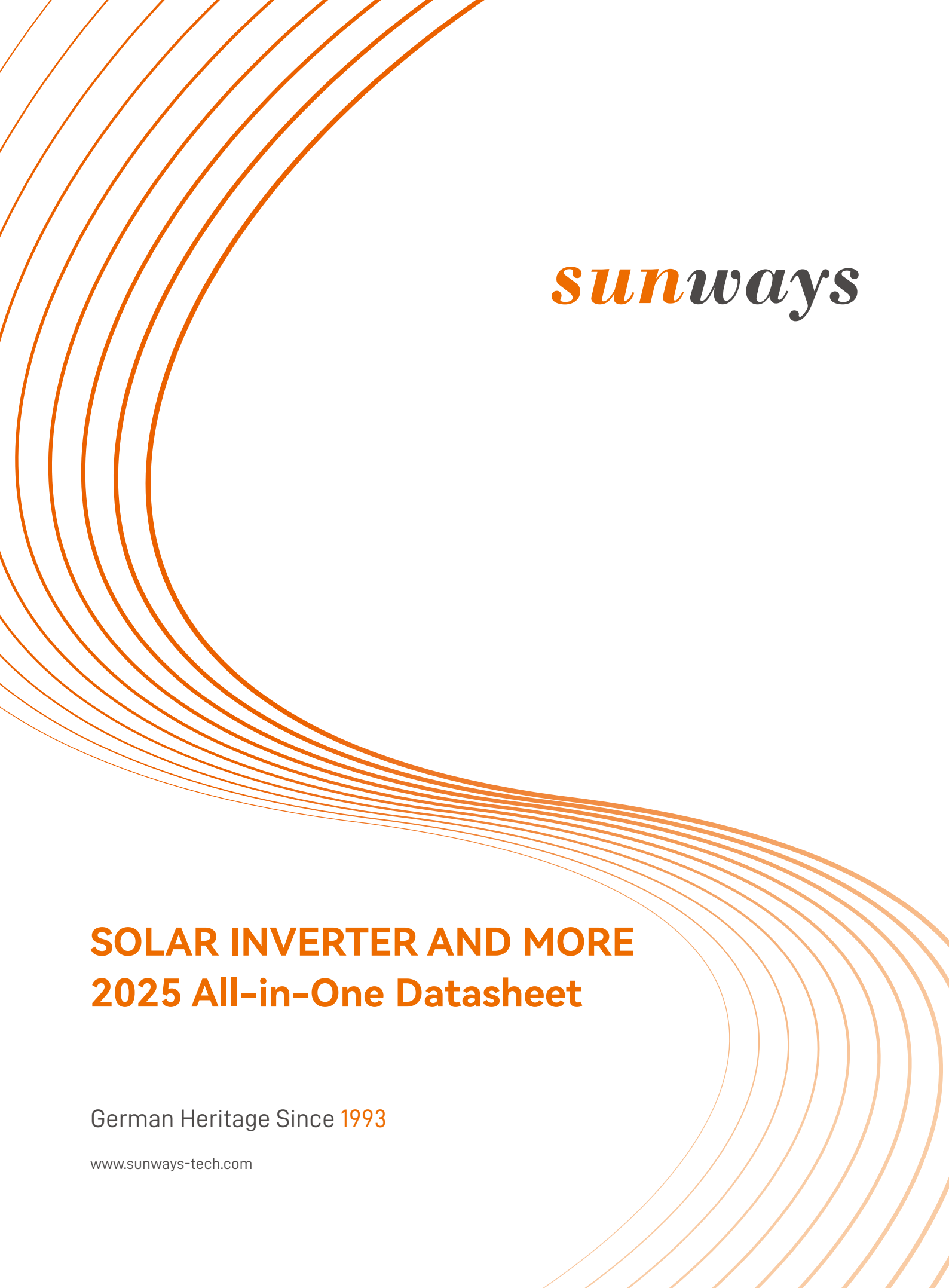




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SOLAR INVERTER AND MORE 2025 All-in-One Datasheet

German Heritage Since **1993**

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STS Series



- 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

SAFE & RELIABLE



- High yield with Max. Efficiency 97.5%
- European weighted efficiency 97%
- Wide MPPT voltage range
- Up to 10% continuous output overloading capacity
- Single MPPT design with precise MPPT algorithm

HIGH YIELD



- Compact elegant design, light weight, one-person installation
- Plug and play connectors, easy for installation
- Support wireless and wired internet connection (RS485/WiFi/GPRS/LAN optional)
- Remote upgrading available
- Fast and easy configuration via App or OLED display

EASY TO USE



Model	STS-1KTL-S-P	STS-1.5KTL-S-P	STS-2KTL-S-P	STS-2.5KTL-S-P	STS-3KTL-S-P	STS-3.3KTL-S-P*
Input						
Max. Input Power (W)	1,600	2,400	3,200	4,000	4,800	4,800
Start-up Voltage (V)	60	60	60	60	60	60
Min. DC Voltage (V)	55	55	55	55	55	55
Max. DC Input Voltage (V)	500	500	500	500	500	500
Rated DC Input Voltage (V)	360	360	360	360	360	360
MPPT Voltage Range (V)	80~450	80~450	80~450	80~450	80~450	80~450
Number of MPP Trackers	1	1	1	1	1	1
Number of DC Inputs per MPPT	1	1	1	1	1	1
Max. Input Current (A)	16	16	16	16	16	16
Max. Short-circuit Current (A)	20	20	20	20	20	20
Output						
Rated Output Power (W)**	1,000	1,500	2,000	2,500	3,000	3,300
Max. Output Power (W)	1,100	1,650	2,200	2,750	3,300	3,300
Max. Apparent Power (VA)	1,100	1,650	2,200	2,750	3,300	3,300
Grid Type (V)**	220/230					
Rated AC Frequency (Hz)	50/60 45-55/55-65					
Max. Output Current (A)	4.8	7.2	9.6	12	14.4	14.4
Power Factor	0.8 leading...0.8 lagging					
THDi @ Rated Power	< 3%					
DCI	< 0.5%In					
Efficiency						
Max. Efficiency	97.3%	97.3%	97.5%	97.5%	97.5%	97.5%
Euro Efficiency	96.4%	96.4%	97.0%	97.0%	97.0%	97.0%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Protection						
DC Reverse Polarity Protection	Integrated					
Insulation Resistance Detection	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 [W*H*D] (mm)	327*297*114					
Weight (kg)	6.5					
Protection Degree	IP65					
Self-consumption at Night (W)	< 1					
Topology	Transformerless					
Operating Temperature Range (° C)	-30~60					
Relative Humidity (%)	0~100					
Operating Altitude (m)	4000 (derating > 3000)					
Cooling	Natural Convection					
Noise Level (dB)	< 25					
Display	OLED & LED					
Communication	RS485/WiFi/GPRS/LAN (Optional)					

* STS 3.3KTL-S-P is only available for India.
** Due to differences in voltage values in various countries, minor variations may occur. The final interpretation rights belong to Sunways.



- MAX. EFFICIENCY 97.5%
- IP66 PROTECTION

STS 3~4kW

Single Phase | 1 MPPT | On Grid

- 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

SAFE & RELIABLE



- High yield with Max. Efficiency 97.6%
- European weighted efficiency 97.2%
- Wide MPPT voltage range
- Up to 10% continuous output overloading capacity
- Single MPPT design with precise MPPT algorithm

HIGH YIELD



- Compact elegant design, light weight, one-person installation
- Plug and play connectors, easy for installation
- Support wireless and wired internet connection (RS485/WiFi/GPRS/LAN optional)
- Remote upgrading available
- Fast and easy configuration via App or OLED display

EASY TO USE



Model	STS-3KTL-M	STS-3.3KTL-M	STS-3.6KTL-M	STS-4KTL-M
Input				
Max. Input Power (W)	4,800	5,280	5,760	6,400
Start-up Voltage (V)	60	60	60	60
Max. DC Input Voltage (V)	500	500	600	600
Rated DC Input Voltage (V)	360	360	360	360
MPPT Voltage Range (V)	80-450	80-450	100-550	100-550
Number of MPP Trackers	1	1	1	1
Number of DC Inputs per MPPT	1	1	1	1
Max. Input Current (A)	20	20	20	20
Max. Short-circuit Current (A)	26	26	26	26
Output				
Rated Output Power (W)**	3,000	3,300	3,680	4,000
Max. Output Power (W)	3,300	3,300	3,680	4,000
Max. Apparent Power (VA)	3,300	3,300	3,680	4,000
Grid Type (V)**	220/230			
Rated AC Frequency (Hz)	50/60			
Max. Output Current (A)	15	15	16	18.2
Power Factor	0.8 leading...0.8 lagging			
THDi @ Rated Power	<3% @Rated Output Power			
DCI	< 0.5%In			
Efficiency				
Max. Efficiency	97.6%	97.6%	97.6%	97.6%
Euro Efficiency	97.2%	97.2%	97.2%	97.2%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%
Protection				
DC Reverse Polarity Protection	Integrated			
Insulation Resistance Detection	Integrated			
DC Switch	Optional			
AFCI	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 [W*H*D] (mm)	327*297*114			
Weight (kg)	6.5			
Protection Degree	IP66			
Self-consumption at Night (W)	< 1			
Topology	Transformerless			
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	RS485/WiFi/GPRS/LAN (Optional)			
Compliance	IEC62109、IEC62116、 IEC61727、IEC60068、IEC61683、EN50549、EN61000、BIS			

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STS Series



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- Adapt to complex grid environments
- High anti-corrosion ability with aluminum alloy die casting technology
- Wider working temperature and altitude, adapt to various installation environments

SAFE & RELIABLE



- High yield with Max. Efficiency 98.1%
- European weighted efficiency 97.6%
- Wide MPPT voltage range
- Up to 10% continuous output overloading capacity
- With a max input current of 20A, compatible with high-power panels

HIGH YIELD



- Compact elegant design, light weight, one-person installation
- Plug and play connectors, easy for installation
- Support wireless and wired internet connection (RS485/WiFi/GPRS/LAN optional)
- Remote upgrading available
- Fast and easy configuration via App or OLED display

EASY TO USE



Model	STS-3KTL-SE	STS-3.6KTL-SE	STS-4KTL-SE	STS-4.6KTL-SE	STS-5KTL-SE	STS-6KTL-SE
Input						
Max. Input Power (W)	4800	5760	6400	7360	8000	9600
Start-up Voltage (V)	80	80	80	80	80	80
Min. DC Voltage (V)	100	100	100	100	100	100
Max. DC Input Voltage (V)	600	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360	360
MPPT Voltage Range (V)	100~550	100~550	100~550	100~550	100~550	100~550
No. of MPP Trackers	2	2	2	2	2	2
No. of DC Inputs per MPPT	1/1	1/1	1/1	1/1	1/1	1/1
Max. Input Current (A)	20/20	20/20	20/20	20/20	20/20	20/20
Max. Short-circuit Current (A)	25/25	25/25	25/25	25/25	25/25	25/25
Output						
Rated Output Power (W)**	3000	3680	4000	4600	5000/4990	6000
Max. Output Power (W)	3300	3680	4400	5060	5500/4990	6600
Max. Apparent Power (VA)	3300	3680	4400	5060	5500/4990	6600
Grid Type (V)**	220/230					
Rated AC Frequency (Hz)	50/60					
Max. Output Current (A)	15	16	20	23	25/21.7	30
Power Factor	0.8 leading...0.8 lagging					
THDi @ Rated Power	<3%					
DCI	<0.5%In					
Efficiency						
Max. Efficiency	98.1%	98.1%	98.1%	98.1%	98.1%	98.1%
Euro Efficiency	97.3%	97.3%	97.3%	97.3%	97.5%	97.6%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Protection						
DC Reverse Polarity Protection	Integrated					
Insulation Resistance Detection	Integrated					
AFCI	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 [W*H*D] (mm)	410*360*120					
Weight (kg)	11.5					
Protection Degree	IP66					
Self-consumption at Night (W)	<1					
Topology	Transformerless					
Operating Temperature Range (° C)	-30~60					
Relative Humidity (%)	0~100					
Operating Altitude (m)	3000 (derating > 2000)					
Cooling	Natural Convection					
Noise Level (dB)	< 25					
Display	OLED(Optional)					
Communication	RS485/WiFi/GPRS/LAN (Optional)					

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SAFE & RELIABLE



- High yield with Max. Efficiency 98.1%
- European weighted efficiency 97.5%
- Wide MPPT voltage range
- Up to 10% continuous output overloading capacity
- With a max input current of 15A, compatible with high-power panels

HIGH YIELD



- Compact elegant design, light weight, one-person installation
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- Support wireless and wired internet connection (RS485/WiFi/GPRS/LAN optional)
- Remote upgrading available
- Fast and easy configuration via App or OLED display

EASY TO USE



Model	STS-3KTL-P	STS-3.6KTL-P	STS-4.2KTL-P	STS-4.6KTL-P	STS-5KTL-P	STS-6KTL-P
Input						
Max. Input Power (W)	4,800	5,760	6,720	7,360	8,000	9,600
Start-up Voltage (V)	80	80	80	80	80	80
Min. DC Voltage (V)	100	100	100	100	100	100
Max. DC Input Voltage (V)	600	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360	360
MPPT Voltage Range (V)	100-550	100-550	100-550	100-550	100-550	100-550
Number of MPP Trackers	2	2	2	2	2	2
Number of DC Inputs per MPPT	1	1	1	1	1	1
Max. Input Current (A)	15/15 ^①	15/15 ^①	15/15 ^①	15/15 ^①	15/15 ^①	15/15 ^①
Max. Short-circuit Current (A)	20/20	20/20	20/20	20/20	20/20	20/20
Output						
Rated Output Power (W)**	3,000	3,600	4,200	4,600	5,000/4,990 ^{②**}	6,000
Max. Output Power (W)	3,300	3,960*	4,600	4,600	5,500/4,990 ^{②**}	6,600
Max. Apparent Power (VA)	3,300	3,960*	4,600	4,600	5,500/4,990 ^{②**}	6,600
Grid Type (V)**	220/230					
Rated AC Frequency (Hz)	50/60 45-55/55-65					
Max. Output Current (A)	15	18***	21	21	25/21.7 ^{③****}	28.7
Power Factor	0.8 leading...0.8 lagging					
THDi @ Rated Power	<3%					
DCI	<0.5%In					
Efficiency						
Max. Efficiency	98.1%	98.1%	98.1%	98.1%	98.1%	98.1%
European Efficiency	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%
MPPT Efficiency	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 [W*H*D] (mm)	410*360*120					
Weight (kg)	13					
Protection Degree	IP65					
Self-consumption at Night (W)	<1					
Topology	Transformerless					
Operating Temperature Range (° C)	-30~60					
Relative Humidity (%)	0~100					
Operating Altitude (m)	4000 (derating@ > 3000)					
Cooling	Natural Convection					
Noise Level (dB)	< 25					
Display	OLED & LED					
Communication	RS485/WiFi/GPRS/LAN (Optional)					

① STS-3~6KTL series maximum input current per string is 12.5A, and STS-3~6KTL-P version is 15A, products deliver upon the order.

② The grid feed in power for AS/NZS 4777.2 is limited 4.99kW & 4.99kVA & 21.7A.

* : 3680 for G98. ** : 5000 for C10/11. *** : 16 for G98. **** : 21.7 for C10/11.

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STS Series



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- Adapt to complex grid environments
- High anti-corrosion ability with aluminum alloy die casting technology
- Wider working temperature and altitude, adapt to various installation environments

SAFE & RELIABLE



- High yield with Max. Efficiency 98.1%
- European weighted efficiency 97.5%
- Wide MPPT voltage range
- With a max input current of 20A, compatible with high-power panels

HIGH YIELD



- Compact elegant design, light weight, one-person installation
- Plug and play connectors, easy for installation
- Support wireless and wired internet connection (RS485/WiFi/GPRS/LAN optional)
- Remote upgrading available
- Fast and easy configuration via App or OLED display

EASY TO USE



Model	STS-7.5KTL-SE	STS-8KTL-SE
Input		
Start-up Voltage (V)	80	80
Max. DC Input Voltage (V)	600	600
Rated DC Input Voltage (V)	360	360
MPPT Voltage Range (V)	100~550	100~550
Full power MPPT voltage range(V)	200~500	210~500
No. of MPP Trackers	2	2
No. of DC Inputs per MPPT	1/1	1/1
Max. Input Current (A)	20/20	20/20
Max. Short-circuit Current (A)	25/25	25/25
Output		
Rated Output Power (W)**	7500	8000
Max. Output Power (W)	7500	8000
AC output rated apparent power(VA)	7500	8000
Max. Apparent Power (VA)	7500	8000
Grid Type (V)**	220/230	
Rated AC Frequency (Hz)	50/60	
AC output rated current(A)	32.6	34.8
Max. Output Current (A)	34.1	36.3
Power Factor	0.8 leading ...0.8 lagging	
THDi @ Rated Power	<3% @Rated Output Power	
DCI	<0.5%In	
Efficiency		
Max. Efficiency	98.1%	
Euro Efficiency	97.5%	
MPPT Efficiency	99.9%	
Protection		
DC Reverse Polarity Protection	Integrated	
Insulation Resistance Detection	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 [W*H*D] (mm)	410*360*120	
Weight (kg)	13	
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)	3000 (derating@ > 2000)	
Cooling	Natural Convection	
Noise Level (dB)	< 25	
Display	OLED (Optional)	
Communication	RS485/WiFi/GPRS/LAN (Optional)	

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STS Series



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

SAFE & RELIABLE



- High yield with Max. Efficiency 98.1%
- European weighted efficiency 97.6%
- Wide MPPT voltage range
- Up to 10% continuous output overloading capacity
- With a max input current of 15A, compatible with high-power panels

HIGH YIELD



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

EASY TO USE



Model	STS-7KTL	STS-8KTL	STS-9KTL	STS-10KTL	STS-11KTL*
Input					
Max. Input Power (W)	11,200	12,800	14,400	16,000	16,000
Start-up Voltage (V)	80	80	80	80	80
Max. DC Input Voltage (V)	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360
MPPT Voltage Range (V)	80~550	80~550	80~550	80~550	80~550
Number of MPP Trackers	2	2	2	2	2
Number of DC Inputs per MPPT	1/2	1/2	1/2	1/2	1/2
Max. Input Current (A)	15/30	15/30	15/30	15/30	15/30
Max. Short-circuit Current (A)	20/40	20/40	20/40	20/40	20/40
Output					
Rated Output Power (W)**	7,000	8,000	9,000	10,000	11,000
Max. Output Power (W)	7,700	8,800	9,900	11,000	11,000
AC Output Rated Apparent Power (VA)	7,000	8,000	9,000	10,000	11,000
Max. Apparent Power (VA)	7,700	8,800	9,900	11,000	11,000
Grid Type (V)**	220/230				
Rated AC Frequency (Hz)	50/60				
AC Output Rated Current (A)	30.4	34.8	39.1	43.5	47.8
Max. Output Current (A)	33.5	38.3	43	47.8	47.8
Power Factor	0.8 leading...0.8 lagging				
THDi @ Rated Power	<3%				
DCI	< 0.5%In				
Efficiency					
Max. Efficiency	98.1%	98.1%	98.1%	98.1%	98.1%
Euro Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Protection					
DC Reverse Polarity Protection	Integrated				
Insulation Resistance Detection	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 [W*H*D] (mm)	550*410*175				
Weight (kg)	24	26			
Protection Degree	IP65				
Self-consumption at Night (W)	< 1				
Topology	Transformerless				
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)				

* STS 11KTL is only available for Brazil.
** Due to differences in voltage values in various countries, minor variations may occur. The final interpretation rights belong to Sunways.

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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
Number of MPP Trackers	2	2	2	2	2	2	2	2	2	2
Number of DC Inputs per MPPT	1	1	1	1	1	1	1/2	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
Grid Type (V)**	3L/N/PE, 230/400V									
Rated AC Frequency (Hz)	50/60 45-55/55-65									
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									
THDi @ Rated Power	< 3%									
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%
Euro 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 Detection	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 [W*H*D] (mm)	550*410*175									
Weight (kg)	23						26	29		
Protection Degree	IP65									
Self-consumption at Night (W)	< 1									
Topology	Transformerless									
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)									
** Due to differences in voltage values in various countries, minor variations may occur. The final interpretation rights belong to Sunways.										

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STT Series



- Integrated surge protection for both DC and AC
- IP65 design ensures reliable performance for outdoor applications
- Integrated AFCI Functionality for Enhanced Safety
- Capable of operating flawlessly under phase shifts and harmonic grids

SAFE & RELIABLE



- High yield with Max. Efficiency 98.6% , European weighted efficiency 98.2%
- Up to 150% Oversizing of Attached PV Arrays for Increased Flexibility and Efficiency
- Increased PV panels current to 20A and MPPT switching frequency to 20KHz, reducing overall weight
- Up to 10% continuous output overloading capacity

HIGH YIELD



- Support wireless and wired internet connection (RS485, WiFi/GPRS/LAN optional)
- Remote upgrading available
- Real-time temperature monitoring and protection for multiple power transistors
- Effortless commissioning and monitoring through the Sunways Portal APP

EASY TO USE



Model	STT-10KTL-SE-LV	STT-15KTL-SE-LV	STT-20KTL-SE-LV
Input			
Start-up Voltage (V)	180	180	180
Max. DC Input Voltage (V)	750	750	750
Rated DC Input Voltage (V)	360	360	360
MPPT Voltage Range (V)	200-650	200-650	200-650
No. of MPP Trackers	2	2	2
No. of DC Inputs per MPPT	2	2	2
Max. Input Current (A)	40/40	40/40	40/40
Max. Short-circuit Current (A)	50/50	50/50	50/50
Output			
Rated Output Power (W)	10000	15000	20,000
Max. Output Power (W)	11000	16500	22,000
AC output rated apparent power (VA)	10000	15000	20,000
Max. Apparent Power (VA)	11000	16500	22,000
Rated Output Voltage (V)	3 / N / PE, 127 / 220V		
Rated AC Frequency (Hz)	50/60	50/60	50/60
AC output rated current (A)	26.2	39.4	52.5
Max. Output Current (A)	28.9	43.3	57.8
Power Factor	0.8 leading ...0.8 lagging		
THDi @ Rated Power	<3%		
DCI	<0.5%In		
Efficiency			
Max. Efficiency	98.6%	98.6%	98.6%
Euro Efficiency	98.2%	98.2%	98.2%
MPPT Efficiency	99.9%	99.9%	99.9%
Protection			
DC Reverse Polarity Protection	Integrated		
Insulation Resistance Protection	Integrated		
DC Switch	Optional		
AFCI	Optional		
Surge Protection	Integrated		
Over-temperature Protection	Integrated		
Residual Current Protection	Integrated		
Islanding protection	Integrated		
AC Short-circuit Protection	Integrated		
AC Over-voltage Protection	Integrated		
General Data			
Dimensions [W*H*D] (mm)	550*410*199		
Weight (kg)	27.4		
Protection Degree	IP66		
Self-consumption at Night (W)	<1		
Topology	Transformerless		
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	RS485/WiFi/GPRS/LAN (Optional)		

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



- MAX. EFFICIENCY 98.6%
- IP66 PROTECTION

STT 15~30kW

Three Phase | 1/2 MPPTs | On Grid

- Integrated surge protection for both DC and AC
- IP66 design ensures reliable performance for outdoor applications
- Integrated AFCI Functionality for Enhanced Safety
- Capable of operating flawlessly under phase shifts and harmonic grids

SAFE & RELIABLE



- High yield with Max. Efficiency 98.6% , European weighted efficiency 98.2%
- Up to 150% Oversizing of Attached PV Arrays for Increased Flexibility and Efficiency
- Increased PV panels current to 20A and MPPT switching frequency to 20KHz, reducing overall weight
- Up to 10% continuous output overloading capacity

HIGH YIELD



- Support wireless and wired internet connection (RS485, WiFi/GPRS/LAN optional)
- Remote upgrading available
- Real-time temperature monitoring and protection for multiple power transistors
- Effortless commissioning and monitoring through the Sunways Portal APP

EASY TO USE



Model	STT-15KTL-SE-S	STT-15KTL-SE	STT-20KTL-SE	STT-25KTL-SE	STT-30KTL-SE
Input					
Start-up Voltage (V)	180	180	180	180	180
Max. DC Input Voltage (V)	1100	1100	1100	1100	1100
Rated DC Input Voltage (V)	620	620	620	620	620
MPPT Voltage Range (V)	200-950	200-950	200-950	200-950	200-950
No. of MPP Trackers	1	2	2	2	2
No. of DC Inputs per MPPT	2	2/2	2/2	2/2	2/2
Max. Input Current (A)	40	40/40	40/40	40/40	40/40
Max. Short-circuit Current (A)	50	50/50	50/50	50/50	50/50
Output					
Rated Output Power (W)	15000	15000	20,000	25000	30000
Max. Output Power (W)	16500	16500	22,000	27500	33000
AC output rated apparent power (VA)	15000	15000	20,000	25000	30000
Max. Apparent Power (VA)	16500	16500	22,000	27500	33000
Rated Output Voltage (V)	3 / N / PE, 230 / 400V				
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
AC output rated current (A)	21.6	21.6	29	36.2	43.5
Max. Output Current (A)	23.8	23.8	31.9	39.8	47.8
Power Factor	0.8 leading ...0.8 lagging				
THDi @ Rated Power	<3%				
DCI	<0.5%In				
Efficiency					
Max. Efficiency	98.6%	98.6%	98.6%	98.6%	98.6%
Euro Efficiency	98.2%	98.2%	98.2%	98.2%	98.2%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Protection					
DC Reverse Polarity Protection	Integrated				
Insulation Resistance Protection	Integrated				
DC Switch	Optional				
AFCI	Optional				
Surge Protection	Integrated				
Over-temperature Protection	Integrated				
Residual Current Protection	Integrated				
Islanding protection	Integrated				
AC Short-circuit Protection	Integrated				
AC Over-voltage Protection	Integrated				
General Data					
Dimensions [W*H*D] (mm)	550*410*199				
Weight (kg)	27.4				
Protection Degree	IP66				
Self-consumption at Night (W)	<1				
Topology	Transformerless				
Operating Temperature Range (° C)	-30-60				
Relative Humidity (%)	0~100%				
Operating Altitude (m)	3000				
Cooling	Fan Cooling				
Noise Level (dB)	<40				
Display	OLED & LED				
Communication	RS485/WiFi/GPRS/LAN (Optional)				

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



STT Series



- MAX. EFFICIENCY 98.8%
- IP66 PROTECTION

STT 30~60kW

Three Phase | 4 MPPTs | On Grid

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

SAFE & RELIABLE



- High yield with Max. Efficiency 98.8%
- European weighted efficiency 98.3%
- Wide MPPT voltage range
- Up to 10% continuous output overloading capacity
- DC 2 in 1 connection enabled, compatible with high-power panels

HIGH YIELD



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

EASY TO USE

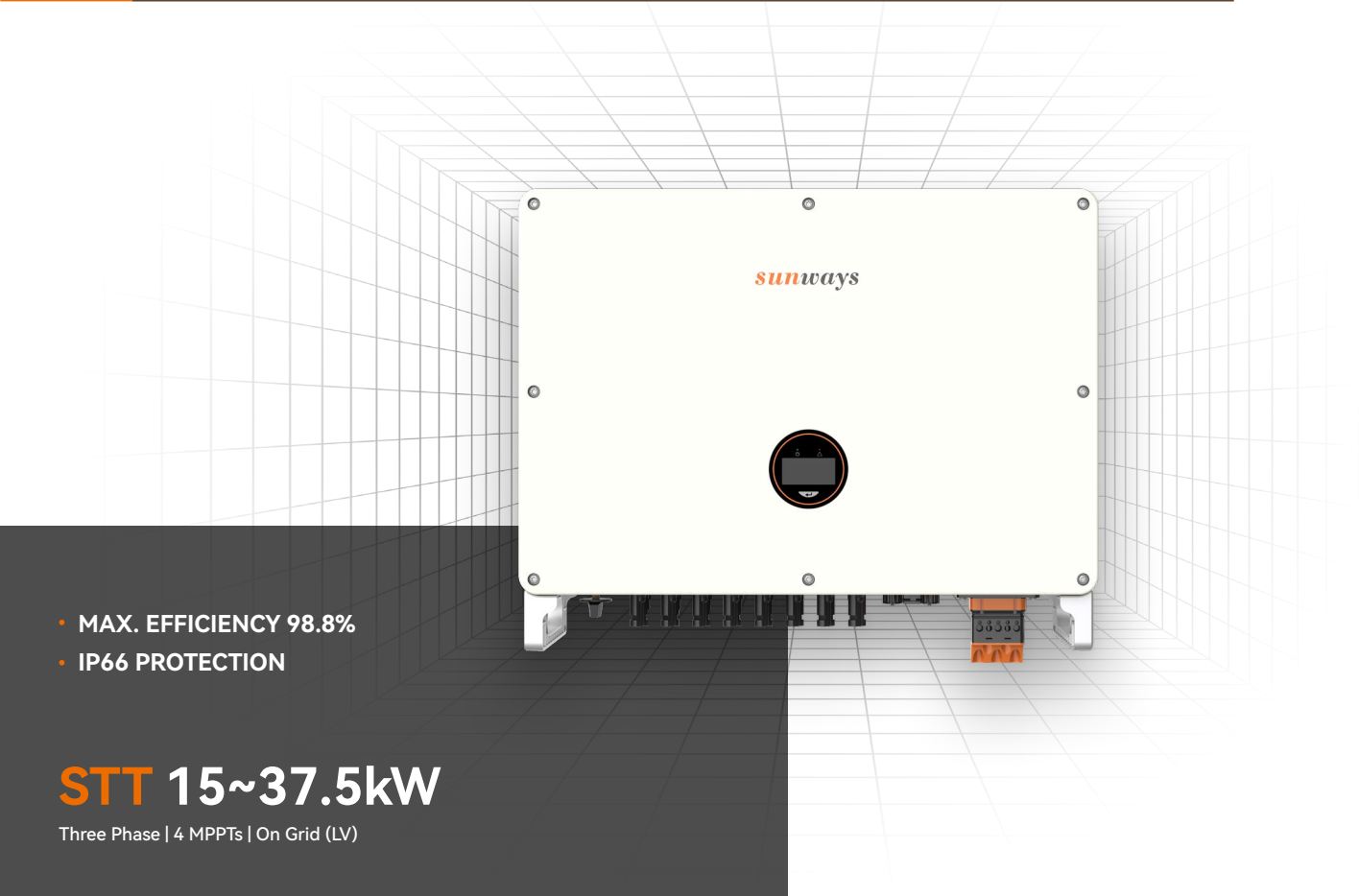


Model	STT-29.9KTL*	STT-30KTL	STT-33KTL	STT-36KTL	STT-40KTL	STT-45KTL	STT-50KTL-M	STT-60KTL-M
Input								
Max. Input Power (W)	47,840	48,000	52,800	57,600	64,000	72,000	80,000	96,000
Start-up Voltage (V)	180	180	180	180	180	180	180	180
Max. DC Input Voltage (V)	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Rated DC Input Voltage (V)	620	620	620	620	620	620	620	620
MPPT Voltage Range (V)	180-1000	180-1000	180-1000	180-1000	180-1000	180-1000	180-1000	180-1000
Number of MPP Trackers	4	4	4	4	4	4	4	4
Number of DC Inputs per MPPT	2	2	2	2	2	2	2	2
Max. Input Current (A)	32/32/32/32	32/32/32/32	32/32/32/32	32/32/32/32	32/32/32/32	32/32/32/32	32/32/32/32	32/32/32/32
Max. Short-circuit Current (A)	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40
Output								
Rated Output Power (W)**	29,900	30,000	33,000	36,000	40,000	45,000	50,000	60,000
Max. Output Power (W)	29,900	33,000	36,300	39,600	44,000	49,500	55,000	66,000
AC Output Rated Apparent Power (VA)	29,900	30,000	33,000	36,000	40,000	45,000	50,000	60,000
Max. Apparent Power (VA)	29,900	33,000	36,300	39,600	44,000	49,500	55,000	66,000
Grid Type (V)**	3 L/ N / PE. 380 / 400V							
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
AC Output Rated Current (A)	43.3	43.5	47.8	52.2	58.0	65.2	72.5	87.0
Max. Output Current (A)	43.3	47.8	52.6	57.4	63.8	71.7	79.7	95.7
Power Factor	0.8 leading...0.8 lagging							
THDi @ Rated Power	<3%							
DCI	<0.5%In							
Efficiency								
Max. Efficiency	98.8%	98.8%	98.8%	98.8%	98.8%	98.8%	98.8%	98.8%
Euro Efficiency	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%	98.3%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Protection								
DC Reverse Polarity Protection	Integrated							
Insulation Resistance Detection	Integrated							
DC Switch	Integrated							
AFCI	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 [W*H*D] (mm)	600*400*270							
Weight (kg)	42							
Protection Degree	IP66							
Self-consumption at Night (W)	<1							
Topology	Transformerless							
Operating Temperature Range (° C)	-30~60							
Relative Humidity (%)	0~100							
Operating Altitude (m)	4000 (derating > 3000)							
Cooling	Smart Fan Cooling							
Display	OLED & LED							
Communication	RS485, WiFi/ GPRS/LAN(Optional)							

* STT 29.9KTL is only available for Australia.
** Due to differences in voltage values in various countries, minor variations may occur. The final interpretation rights belong to Sunways.



STT LV Series



- MAX. EFFICIENCY 98.8%
- IP66 PROTECTION

STT 15~37.5kW

Three Phase | 4 MPPTs | On Grid (LV)

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

SAFE & RELIABLE



- High yield with Max. Efficiency 98.8%
- European weighted efficiency 98.3%
- Up to 10% continuous output overloading capacity
- 4 MPPT design, lower PV string mismatch loss

HIGH YIELD



- String monitoring, improve O&M efficiency
- Support wireless and wired internet connection (RS485, WiFi/GPRS/LAN optional)
- Remote upgrading available

EASY TO USE



Model	STT-15KTL-LV	STT-20KTL-LV	STT-25KTL-LV	STT-30KTL-LV	STT-37.5KTL-LV
Input					
Max. Input Power (W)	24,000	32,000	40,000	48,000	60,000
Start-up Voltage (V)	180	180	180	180	180
Max. DC Input Voltage (V)	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360
MPPT Voltage Range(V)	180-550	180-550	180-550	180-550	180-550
Full power MPPT voltage range (V)	180-550	180-550	220-550	250-550	300-550
No. of MPP Trackers	4	4	4	4	4
No. of DC Inputs per MPPT	2	2	2	2	2
Max.Input Current(A)	32/32/32/32	32/32/32/32	32/32/32/32	32/32/32/32	32/32/32/32
Max. Short-circuit Current (A)	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40	40/40/40/40
Output					
Rated Output Power (W)**	15,000	20,000	25,000	30,000	37,500
Max. Output Power (W)	16,500	22,000	27,500	33,000	37,500
AC Output Rated Apparent Power (VA)	15,000	20,000	25,000	30,000	37,500
Max. Apparent Power (VA)	16,500	22,000	27,500	33,000	37,500
Grid Type (V)**	3 L/N/ PE, 127/ 220V				
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
AC Output Rated Current (A)	40.0	52.5	65.6	78.7	98.4
Max. Output Current (A)	43.3	57.7	72.2	86.6	98.4
The measured Inrush current (A)	16.5A@10.6ms	16.5A@10.6ms	16.5A@10.6ms	16.5A@10.6ms	16.5A@10.6ms
maximum output fault current (A)	118	118	160	180	180
maximum output overcurrent protection (A)	118	118	160	180	180
Power Factor	0.8 leading...0.8 lagging				
THDi @ Rated Power	<3%				
DCI	<0.5%In				
Efficiency					
Max. Efficiency	98.8%	98.8%	98.8%	98.8%	98.8%
Euro Efficiency	98.3%	98.3%	98.3%	98.3%	98.3%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Protection					
DC Reverse Polarity Protection	Integrated				
Insulation Resistance Detection	Integrated				
AFCI	Optional				
DC Switch	Integrated				
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 [W*H*D] (mm)	600*400*270				
Weight (kg)	42				
Protection Degree	IP66				
Self-consumption at Night (W)	<1				
Topology	Transformerless				
Operating Temperature Range (° C)	-30~60				
Relative Humidity (%)	0~100				
Operating Altitude (m)	3000				
Cooling	Smart Fan Cooling				
Display	OLED				
Communication	RS485, WiFi/ GPRS/LAN(Optional)				

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- MAX. EFFICIENCY 98.8%
- IP65 PROTECTION

STT 50~60kW

Three Phase | 6 MPPTs | On Grid

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

SAFE & RELIABLE



- High yield with Max. Efficiency 98.8%
- European weighted efficiency 98.3%
- Up to 10% continuous output overloading capacity
- Six MPPT design, lower PV string mismatch loss
- DC 2 in 1 connection enabled, compatible with high-power panels

HIGH YIELD



- String monitoring, improve O&M efficiency
- Support wireless and wired internet connection (RS485, WiFi/GPRS/LAN optional)
- Remote upgrading available

EASY TO USE



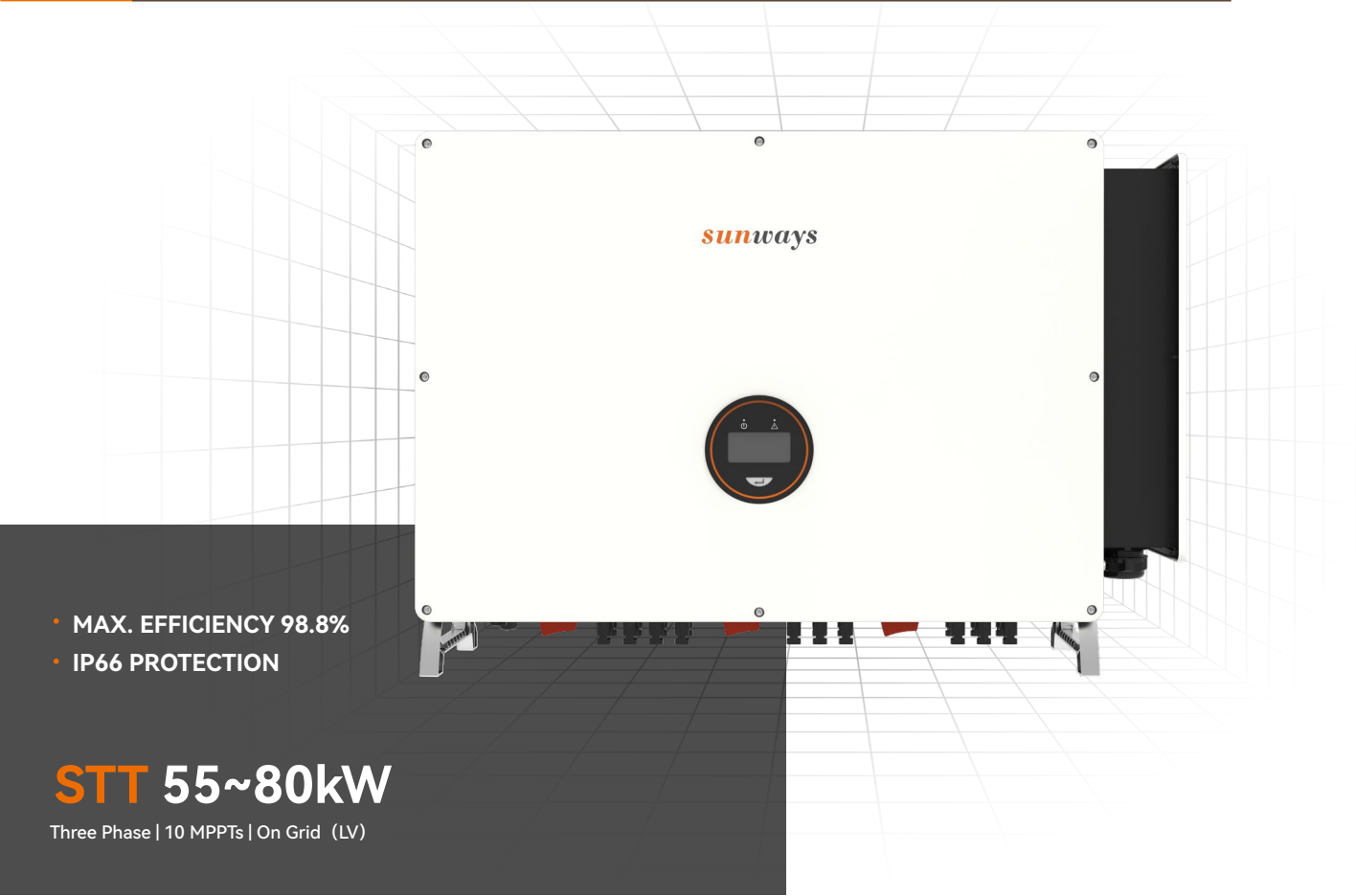
Model	STT-50KTL-P	STT-60KTL-P
Input		
Max. Input Power (W)	80,000	96,000
Start-up Voltage (V)	200	200
Max. DC Input Voltage (V)	1,100	1,100
Rated DC Input Voltage (V)	620	620
MPPT Voltage Range (V)	160-1000	160-1000
Number of MPP Trackers	6	6
Number of DC Inputs per MPPT	2	2
Max. Input Current (A)	26/26/26/26/26/26 ^①	26/26/26/26/26/26 ^①
Max. Short-circuit Current (A)	40/40/40/40/40/40	40/40/40/40/40/40
Output		
Rated Output Power (W)**	50,000	60,000
Max. Output Power (W)	55,000	66,000
Max. Apparent Power (VA)	55,000	66,000
Grid Type (V)**	3L/N/PE, 230/400V	
Rated AC Frequency (Hz)	50/60 45-55/55-65	
Max. Output Current (A)	83.6	95.3
Power Factor	0.8 leading...0.8 lagging	
THDi @ Rated Power	<3%	
DCI	< 0.5% In	
Efficiency		
Max. Efficiency	98.8%	98.8%
Euro Efficiency	98.3%	98.3%
MPPT Efficiency	99.9%	99.9%
Protection		
DC Reverse Polarity Protection	Integrated	
Insulation Resistance Detection	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 [W*H*D] (mm)	850*520*290	
Weight (kg)	58	
Protection Degree	IP65	
Self-consumption at Night (W)	< 1	
Topology	Transformerless	
Operating Temperature Range (° C)	-30~60	
Relative Humidity (%)	0~100	
Operating Altitude (m)	4000 (derating > 3000)	
Cooling	Smart Fan Cooling	
Noise Level (dB)	< 55	
Display	OLED & LED	
Communication	RS485, WiFi/GPRS/LAN (Optional)	

① STT-50/60KTL series maxmium input current per MPPT is 22A, products deliver upon the oder.

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STT Series



- MAX. EFFICIENCY 98.8%
- IP66 PROTECTION

STT 55~80kW
Three Phase | 10 MPPTs | On Grid (LV)

- Real-time fault curve recording, improve O&M efficiency
- IP66 intelligent fans, lower operation temperature, longer lifespan
- Intelligent quad-core processor, information processing more comprehensive, fast, and efficient

INTELLIGENT



- High yield with Max. Efficiency 98.8%
- Up to 10% continuous output overloading capacity
- 10 MPPT design, lower PV string mismatch loss
- DC 2 in 1 connection enabled, compatible with high-power panels

HIGH YIELD



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

CONVENIENCE



Model	STT-55KTL-SE-LV	STT-60KTL-SE-LV	STT-70KTL-SE-LV	STT-75KTL-SE-LV	STT-80KTL-SE-LV
Input					
Start-up Voltage (V)	200	200	200	200	200
Max. DC Input Voltage (V)	750	750	750	750	750
Rated DC Input Voltage (V)	360	360	360	360	360
MPPT Voltage Range (V)	200~750	200~750	200~750	200~750	200~750
Number of MPP Trackers	10	10	10	10	10
Number of DC Inputs per MPPT	2	2	2	2	2
Max. Input Current (A)	10*40				
Max. Short-circuit Current (A)	10*50				
Output					
Rated Output Power (W)**	55,000	60,000	70,000	75,000	80,000
Max. Output Power (W)	60,500	66,000	77,000	82,500	88,000
AC output rated apparent power(VA)	55,000	60,000	70,000	75,000	80,000
Max. Apparent Power (VA)	60,500	66,000	77,000	82,500	88,000
Grid Type (V)**	3L/N/PE, 127/220V,133/230V				
Rated AC Frequency (Hz)	50/60				
AC output rated current (A)	144.4	157.5	183.7	196.9	210
Max. Output Current (A)	158.8	173.2	202.1	216.5	231
Power Factor	0.8 leading...0.8 lagging				
THDi @ Rated Power	<3%				
DCI	< 0.5% In				
Efficiency					
Max. Efficiency	98.8%	98.8%	98.8%	98.8%	98.8%
Euro Efficiency	98.3%	98.3%	98.3%	98.3%	98.3%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Protection					
DC Reverse Polarity Protection	Integrated				
Insulation Resistance Detection	Integrated				
DC Switch	Optional				
Surge Protection	Integrated (Type II)				
Over-temperature Protection	Integrated				
Residual Current Protection	Integrated				
Islanding Protection	Frequency shift, Integrated				
AC Short-circuit Protection	Integrated				
AC Over-voltage Protection	Integrated				
AFCI	Optional				
General Data					
Dimensions [W*H*D] (mm)	1025*640*320				
Weight (kg)	92				
Protection Degree	IP66				
Self-consumption at Night (W)	< 1				
Topology	Transformerless				
Operating Temperature Range (° C)	-30~60				
Relative Humidity (%)	0~100				
Operating Altitude (m)	4000 (derating > 3000)				
Cooling	Smart Fan Cooling				
Display	OLED & LED				
Communication	RS485, WiFi/GPRS/LAN (Optional)				

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



STT Series



- MAX. EFFICIENCY 98.8%
- IP66 PROTECTION

STT 80~125kW

Three Phase | 8/10 MPPTs | On Grid

- Real-time fault curve recording, improve O&M efficiency
- IP68 intelligent fans, lower operation temperature, longer lifespan
- Intelligent quad-core processor, information processing more comprehensive, fast, and efficient

INTELLIGENT



- High yield with Max. Efficiency 98.8%
- Up to 10% continuous output overloading capacity
- 8/10 MPPT design, lower PV string mismatch loss
- DC 2 in 1 connection enabled, compatible with high-power panels

HIGH YIELD



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

CONVENIENCE



Model	STT-80KTL	STT-100KTL	STT-110KTL	STT-100KTL-HV	STT-125KTL-HV
Input					
Max. Input Power (W)	128,000	160,000	176,000	160,000	200,000
Start-up Voltage (V)	200	200	200	200	200
Max. DC Input Voltage (V)	1,100	1,100	1,100	1,100	1,100
Rated DC Input Voltage (V)	620	620	620	750	750
MPPT Voltage Range (V)	200-950	200-950	200-950	200-950	200-950
Number of MPP Trackers	8	10	10	10	10
Number of DC Inputs per MPPT	2	2	2	2	2
Max. Input Current (A)	8*32	10*32	10*32	10*32	10*32
Max. Short-circuit Current (A)	8*40	10*40	10*40	10*40	10*40
Output					
Rated Output Power (W)**	80,000	100,000	110,000	100,000	125,000
Max. Output Power (W)	88,000	110,000	121,000	110,000	137,500
Max. Apparent Power (VA)	88,000	110,000	121,000	110,000	137,500
Grid Type (V)**	3L/N/PE, 230/400V			3L/PE,288/500V	
Rated AC Frequency (Hz)	50/60 45-55/55-65				
Max. Output Current (A)	127	158.8	174.8	127	158.8
Power Factor	0.8 leading...0.8 lagging				
THDi @ Rated Power	<3%				
DCI	< 0.5% In				
Efficiency					
Max. Efficiency	98.8%	98.8%	98.8%	98.8%	98.8%
Euro Efficiency	98.3%	98.3%	98.3%	98.3%	98.3%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
Protection					
DC Reverse Polarity Protection	Integrated				
Insulation Resistance Detection	Integrated				
DC Switch	Optional				
AFCI	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 [W*H*D] (mm)	975*680*290				
Weight (kg)	79	82			
Protection Degree	IP66				
Self-consumption at Night (W)	< 1				
Topology	Transformerless				
Operating Temperature Range (° C)	-30~60				
Relative Humidity (%)	0~100				
Operating Altitude (m)	4000 (derating > 3000)				
Cooling	Smart Fan Cooling				
Display	OLED & LED				
Communication	RS485, WiFi/GPRS/LAN (Optional)				

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



STT Series



- Real-time fault curve recording, improve O&M efficiency
- IP66 intelligent fans, lower operation temperature, longer lifespan
- Intelligent quad-core processor, information processing more comprehensive, fast, and efficient

INTELLIGENT



- High yield with Max. efficiency 98.8%
- Up to 10% continuous output overloading capacity
- 10 MPPT design, lower PV string mismatch loss
- DC 2 in 1 connection enabled, compatible with high-power panels

HIGH YIELD



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

CONVENIENCE



Model	STT-100KTL-SE	STT-110KTL-SE	STT-125KTL-SE	STT-136KTL-SE	STT-150KTL-SE
Input					
Max. Input Power (W)	160000	176000	200000	217600	240000
Start-up Voltage (V)	200	200	200	200	200
Max. DC Input Voltage (V)	1100	1100	1100	1100	1100
Rated DC Input Voltage (V)	620	620	620	620	620
MPPT Voltage Range (V)	200~1000	200~1000	200~1000	200~1000	200~1000
Number of MPP Trackers	10	10	10	10	10
Number of DC Inputs per MPPT	2	2	2	2	2
Max. Input Current (A)	10*40	10*40	10*40	10*40	10*40
Max. Short-circuit Current (A)	10*50	10*50	10*50	10*50	10*50
Output					
Rated Output Power (W)**	100,000	110,000	125,000	136,000	150,000
Max. Output Power (W)	110,000	121,000	136,000	149,600	165,000
AC output rated apparent power (VA)	100,000	110,000	125,000	136,000	150,000
Max. Apparent Power (VA)	110,000	121,000	136,000	149,600	165,000
Grid Type**	3L/N/PE, 220/380V, 230/400V				
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
AC output rated current (A)	151.5	166.7	189.4	197	227.3
Max. Output Current (A)	166.7	183.3	206.1	226.7	250
Power Factor	0.8 leading ...0.8 lagging				
THDi @ Rated Power	<3%				
DCI	<0.5%In				
Efficiency					
Max. Efficiency	98.8%	98.8%	98.8%	98.8%	98.8%
European Efficiency	98.3%	98.3%	98.3%	98.3%	98.3%
MPPT Efficiency	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				
Islanding protection	Frequency shift, Integrated				
AC Short-circuit Protection	Integrated				
AC Over-voltage Protection	Integrated				
Intelligent string shutdown	Optional				
AFCI	Optional				
General Data					
Dimensions [W*H*D] (mm)	1025 * 640 * 320				
Weight (kg)	92				
Protection Degree	IP66				
Self-consumption at Night (W)	<1				
Topology	Transformerless				
Operating Temperature Range (° C)	-30~60				
Relative Humidity (%)	0~100				
Operating Altitude (m)	4000 (derating >3000)				
Cooling	Smart Fan Cooling				
Display	OLED & LED				
Communication	RS485/WiFi/GPRS/LAN (Optional)				

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STT Series



- Real-time fault curve recording, improve O&M efficiency
- IP66 intelligent fans, lower operation temperature, longer lifespan
- Intelligent quad-core processor, information processing more comprehensive, fast, and efficient

INTELLIGENT



- High yield with Max. efficiency 98.8%
- Up to 10% continuous output overloading capacity
- 10 MPPT design, lower PV string mismatch loss
- DC 2 in 1 connection enabled, compatible with high-power panels

HIGH YIELD



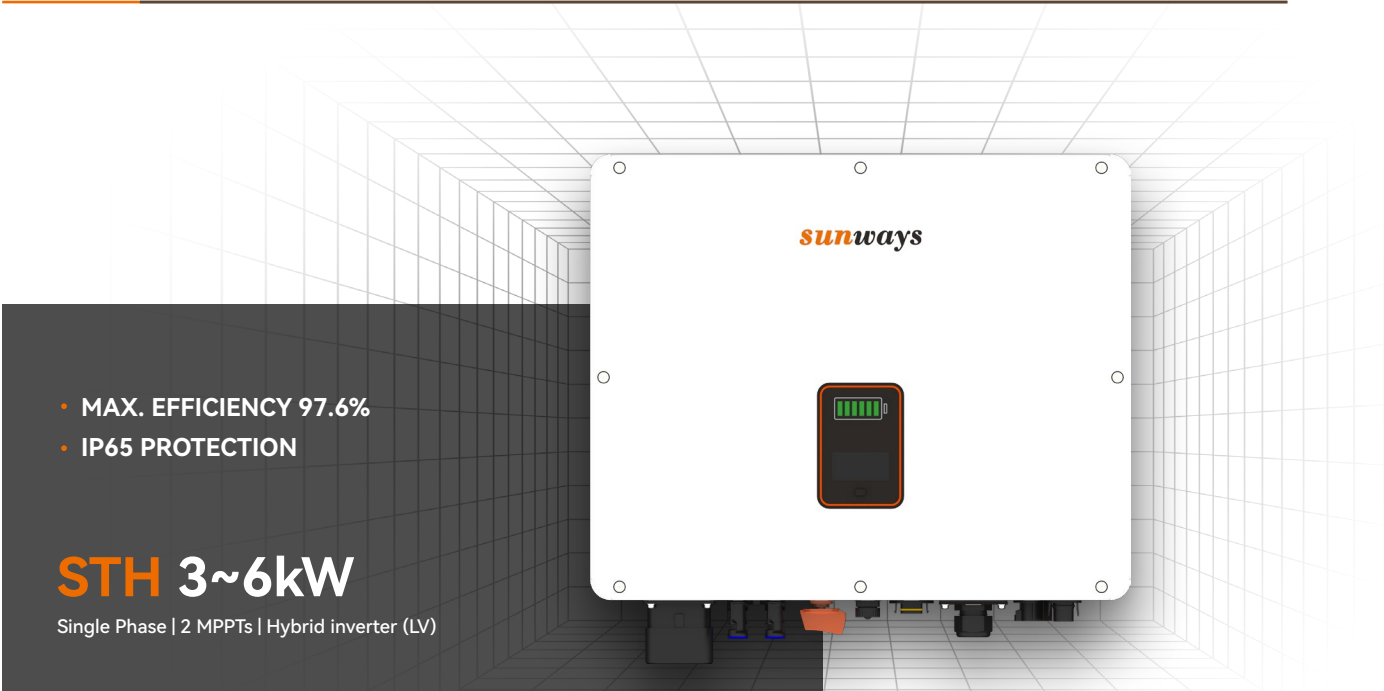
- Support wireless and wired internet connection (RS485, WiFi/GPRS/LAN optional)
- Remote upgrading available
- Fast and easy commissioning via App or OLED display

CONVENIENCE

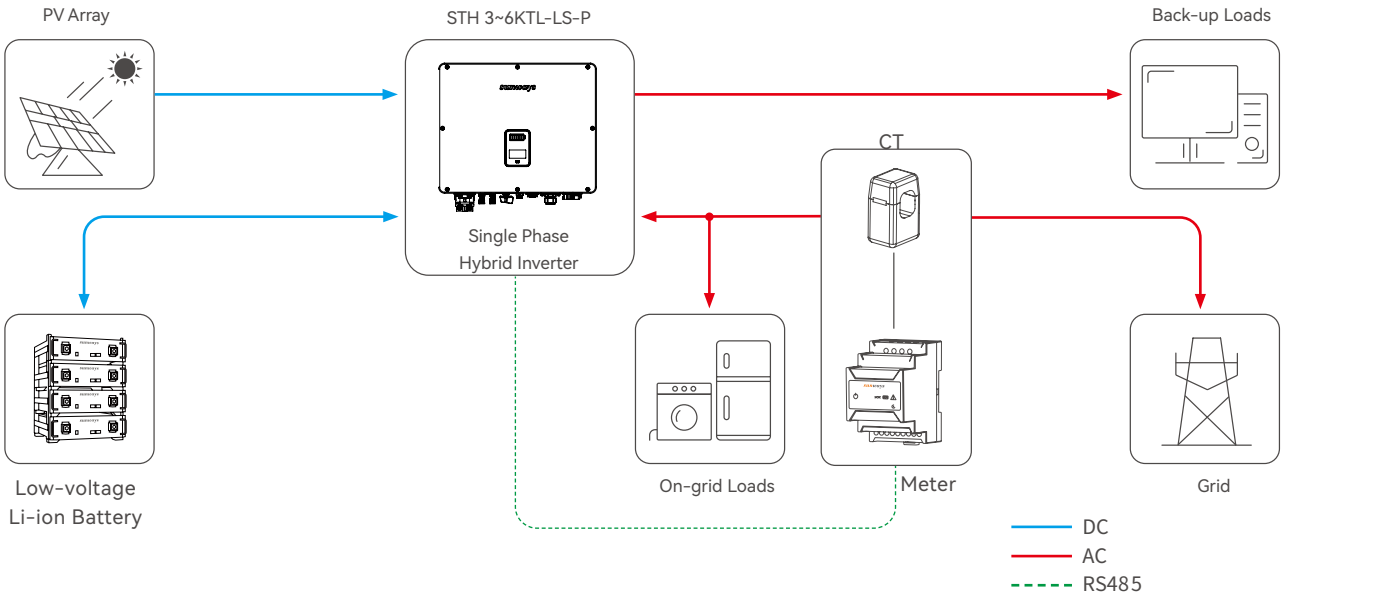


Model	STT-130KTL-SE-HV	STT-145KTL-SE-HV	STT-165KTL-SE-HV	STT-170KTL-SE-HV	STT-200KTL-SE-HV
Input					
Start-up Voltage (V)	200	200	200	200	200
Max. DC Input Voltage (V)	1100	1100	1100	1100	1100
Rated DC Input Voltage (V)	750	750	750	750	750
MPPT Voltage Range (V)	200-1000	200-1000	200-1000	200-1000	200-1000
Number of MPP Trackers	10	10	10	10	10
Number of DC Inputs per MPPT	2	2	2	2	2
Max. Input Current (A)	10*40	10*40	10*40	10*40	10*40
Max. Short-circuit Current (A)	10*50	10*50	10*50	10*50	10*50
Output					
Rated Output Power (W)**	130,000	145,000	165,000	170,000	200,000
Max. Output Power (W)	143,000	159,500	181,500	187,000	220,000
AC output rated apparent power (VA)	130,000	145,000	165,000	170,000	200,000
Max. Apparent Power (VA)	143,000	159,500	181,500	187,000	220,000
Grid Type**	3L/PE, 288/500V				
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
AC output rated current (A)	150.5	167.8	191	196.7	231.5
Max. Output Current (A)	165.5	184.6	210	216.4	254.6
Power Factor	0.8 leading ..0.8 lagging				
THDi @ Rated Power	<3%				
DCI	<0.5%In				
Efficiency					
Max. Efficiency	98.8%	98.8%	98.8%	98.8%	98.8%
European Efficiency	98.3%	98.3%	98.3%	98.3%	98.3%
MPPT Efficiency	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				
Islanding protection	Frequency shift, Integrated				
AC Short-circuit Protection	Integrated				
AC Over-voltage Protection	Integrated				
AFCI	Optional				
General Data					
Dimensions [W*H*D] (mm)	1025*640*320				
Weight (KG)	92				
Protection Degree	IP66				
Self-consumption at Night (W)	<1				
Topology	Transformerless				
Operating Temperature Range (° C)	-30~60				
Relative Humidity (%)	0~100				
Operating Altitude (m)	4000(derating>3000)				
Cooling	Smart Fan Cooling				
Display	OLED & LED				
Communication	RS485/WiFi/GPRS/LAN (Optional)				

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



- IP65 protection degree
Outdoor and Indoor
Application.
- Support TOU
Mode (Peak Shaving).
- Max. 6pcs parallel for
off-grid operation.
- Fast and easy data checking
and commissioning via App
or OLED display.
- Fast charging/discharging of up to
100A to meet the demand of higher
consumption and energy trading.
- Up to 16A 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.
- 10 second 150% off-grid overload
capacity, powering inductive &
capacitive backup load 1.5 times rated
current.



Model	STH-3KTL-LS-P	STH-3.6KTL-LS-P	STH-4KTL-LS-P	STH-4.6KTL-LS-P	STH-5KTL-LS-P	STH-6KTL-LS-P
PV Input						
Max. input power (W)	8000	8600	9000	9000	9000	9000
Starting voltage (V)	120					
Max. input voltage (V)	600					
Rated voltage (V)	360					
MPPT voltage range (V)	100-550					
No. of MPP Trackers	2					
Short-circuit current (A)	20					
Max. current (A)	16					
Battery						
Battery type	Lead acid, lithium batter					
Rated voltage (V)	51.2					
Input voltage (V)	42-60					
Rated charging/discharging power (W)	5000					
Max. charging/discharging current (A)	100					
Battery charging wake-up	Support					
Battery communication wake-up	Support					
Charging method	constant current, constant voltage, floating					
Output(Grid)						
Rated output power (W)	3000	3680	4000	4600	5000	6000
Output voltage range	180~270VAC					
Output frequency (HZ)	50/60					
Rated output current (A)	13	16	17.4	20	21.7	26.1
Adjustable power factor	1 (0.8 leading... 0.8 lagging)					
Grid type (V)	L, N, 230					
Current distortion rate	<3%					
Max. input power	6000	7360	8000	9200	10000	10000
Max. input Current (A)	26	32	34.8	40	43.5	43.5
Output(Back-up)						
Rated output power (W)	3000	3680	4000	4600	5000	5000
Max. apparent output power (VA,s)	4500,10	5520,10	6000,10	6900,10	7500,10	7500,10
Rated output voltage (V)	230					
Output current (A)	13	16	17.4	20	21.7	21.7
Output frequency (Hz)	50/60					
Output voltage range	180~270VAC					
Switch Time (ms)	<10					
Voltage distortion rate	<3%					
Efficiency						
Max. Efficiency	97.60%					
European efficiency	97.30%					
Max. efficiency on battery side and AC side	94.7%					
MPPT efficiency	99.9%					
General Data						
Standby power (W)	<10					
Dimension (W*H*D) (mm)	525*433*186					
Weight (kg)	25.65					
Installation type	Wall mounting					
Operating temperature range (° C)	-25° C~60° C					
Relative humidity range	0~95% RH					
Max. operating altitude (m)	4000					
Noise (dB)	<25					
Cooling	Natural convection					
Protection Degree	IP65					
Communication interface	Battery RS485,CAN, electricity meter SR845, WIFI, GPRS, Bluetooth					
Display	OLED					
Max.parallel connection	6 units					
Isolation method	High-frequency isolation					
Warranty period (years)	5 / 10 (optional)					

- MAX. EFFICIENCY 97.6%
- IP66 PROTECTION

STH 3~8kW

Single Phase | 2 MPPTs | Hybrid inverter (LV)



IP66 protection degree.



Support diesel generators and charging piles.



Max. 3pcs parallel for off-grid operation.



Fast and easy data checking and commissioning.



Up to 160A Fast charging/discharging.



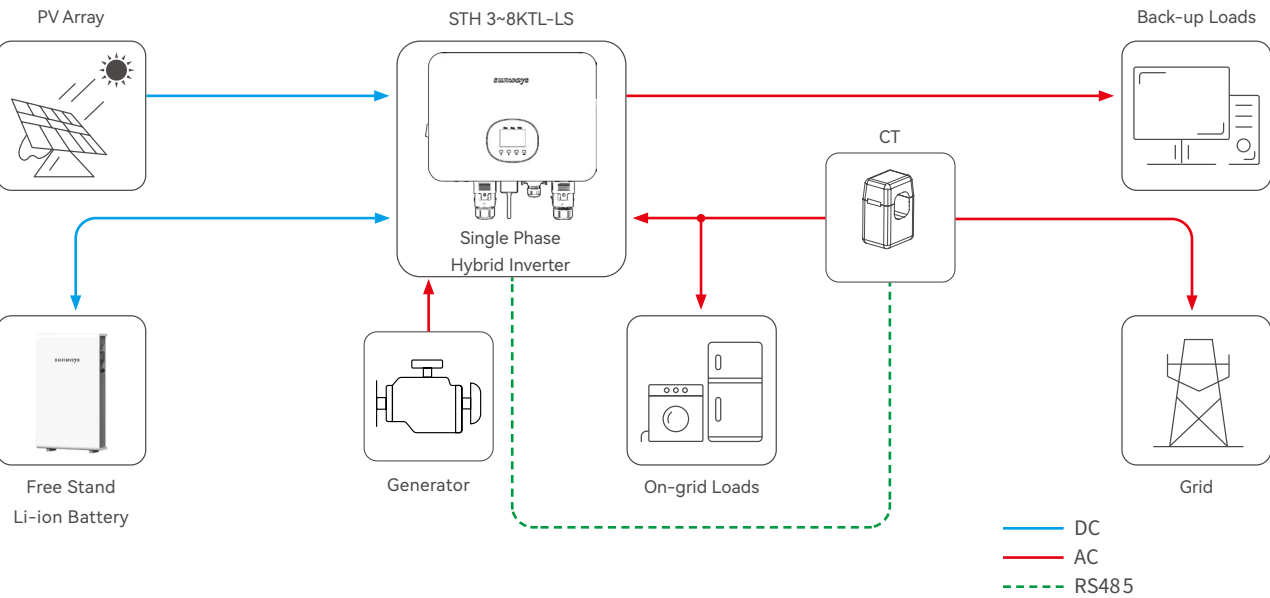
Up to 20A maximum PV input current.



Switch to off-grid mode within 10ms.



Powering inductive & capacitive backup load 2 times rated current.



Model	STH-3KTL-LSS	STH-3.6KTL-LSS	STH-4KTL-LS	STH-4.6KTL-LS	STH-5KTL-LS	STH-6KTL-LS	STH-7.5KTL-LS	STH-8KTL-LS
PV Input								
Start-up Voltage (V)	58	58	58	58	58	58	58	58
Max. DC Input Voltage (V)	600	600	600	600	600	600	600	600
Rated DC Input Voltage (V)	360	360	360	360	360	360	360	360
MPPT Voltage Range (V)	80-550	80-550	80-550	80-550	80-550	80-550	80-550	80-550
No. of MPP Trackers	1	1	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
Max. Input Current (A)	20	20	20	20	20	20	20	20
Max. Short-circuit Current (A)	25	25	25	25	25	25	25	25

Battery								
Battery Type	Lithium battery (with BMS)/Lead Acid							
Battery Communication Mode	CAN							
Battery Voltage Range (V)	40-60	40-60	40-60	40-60	40-60	40-60	40-60	40-60
Max. Charge/Discharge Current (A)	80/80	80/80	100/100	100/100	120/120	120/120	160/160	160/160

Output (Grid)								
Rated Output Power (W)**	3,000	3,680	4,000	4,600	5,000	6,000	7,500	8,000
Max. Output Power (W)	3,300	3,680	4,400	5,060	5,500	6,600	8,250	8,800
AC Output Rated Apparent Power (VA)	3,000	3,680	4,000	4,600	5,000	6,000	7,500	8,000
Max. Apparent Power (VA)	3,300	3,680	4,400	5,060	5,500	6,600	8,250	8,800
Rated Output Voltage (V)**	L/N/PE, 220/230							
Rated AC Frequency (Hz)	50/60							
AC Output Rated Current (A)	13.6	16	19	21	21.7	27.3	31.9	36.4
Max. Output Current (A)	15	16	21	23	25	30	35	40
The measured Inrush current (A)	8.8A@28μs							
Max. Output Fault Current (A)	50	50	50	50	50	80	80	80
Max. Output Overcurrent Protection (A)	50	50	50	50	50	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	3,680	4,200	4,600	5,000	6,000	7,500	8,000
Max. Output Power (W)	3,300	3,680	4,600	5,060	5,500	6,600	8,250	8,800
Back-up Output Rated Apparent Power (VA)	3,000	3,680	4,200	4,600	5,000	6,000	7,500	8,000
Max. Apparent Power (VA)	3,300	3,680	4,600	5,060	5,500	6,600	8,250	8,800
Back-up Output Rated Current (A)	13.6	16	19	21	21.7	27.3	31.9	36.4
Max. Output Current (A)	15	16	21	23	25	30	35	40
UPS Switching Time	<10ms							
Rated Output Voltage (V)	L/N/PE, 220/230							
Rated AC Frequency (Hz)	50/60							
Peak Output Apparent Power (VA)	6,000 ^① , 10s	7,360 ^① , 10s	8,400 ^① , 10s	9,200 ^① , 10s	10,000 ^① , 10s	12,000 ^① , 10s	12,000 ^① , 10s	12,000 ^① , 10s

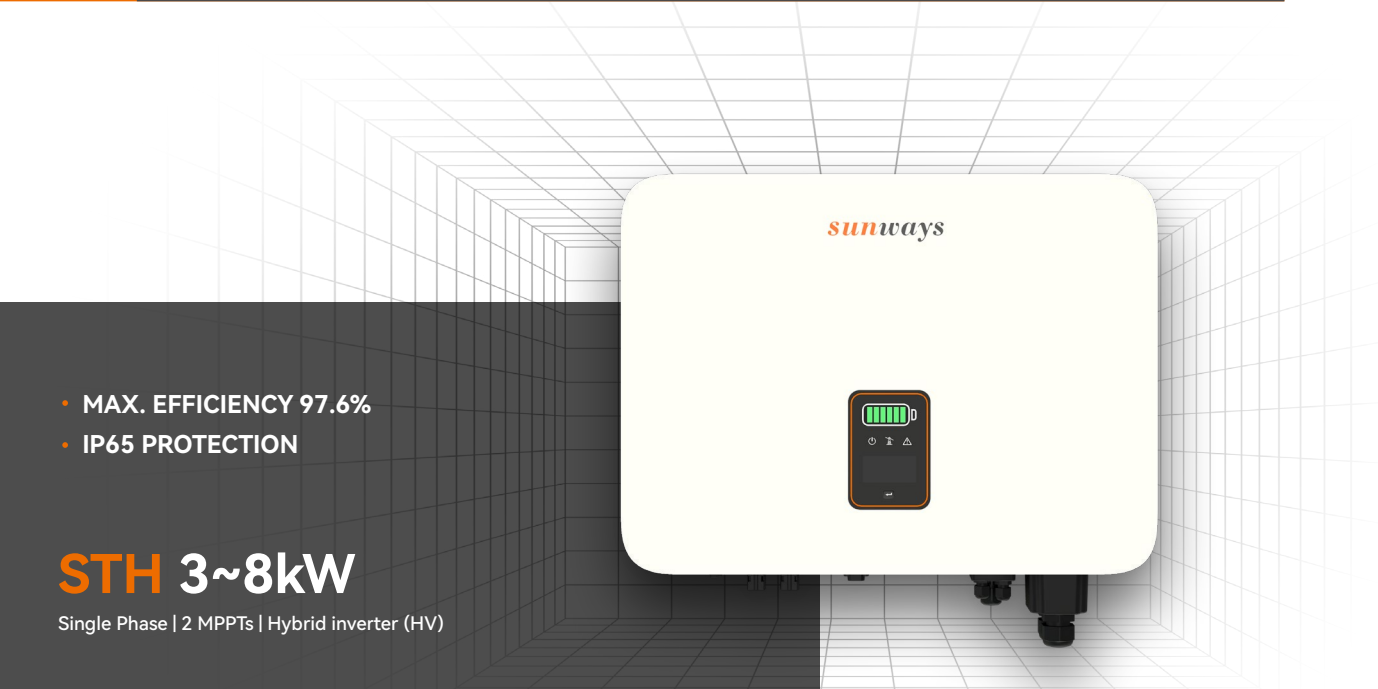
Efficiency								
Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
European Efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Max. Efficiency by AC side	95.7%	95.7%	95.7%	95.7%	95.7%	95.7%	95.5%	95.5%

Protection	
DC Reverse Polarity Protection	Integrated
Insulation Resistance Protection	Integrated
DC Switch	Integrated
AFCI	Optional
Surge Protection	Integrated
Over-temperature Protection	Integrated
Residual Current Protection	Integrated
Islanding Protection	Integrated
AC Over-voltage Protection	Integrated
Overload Protection	Integrated
AC Short-circuit Protection	Integrated

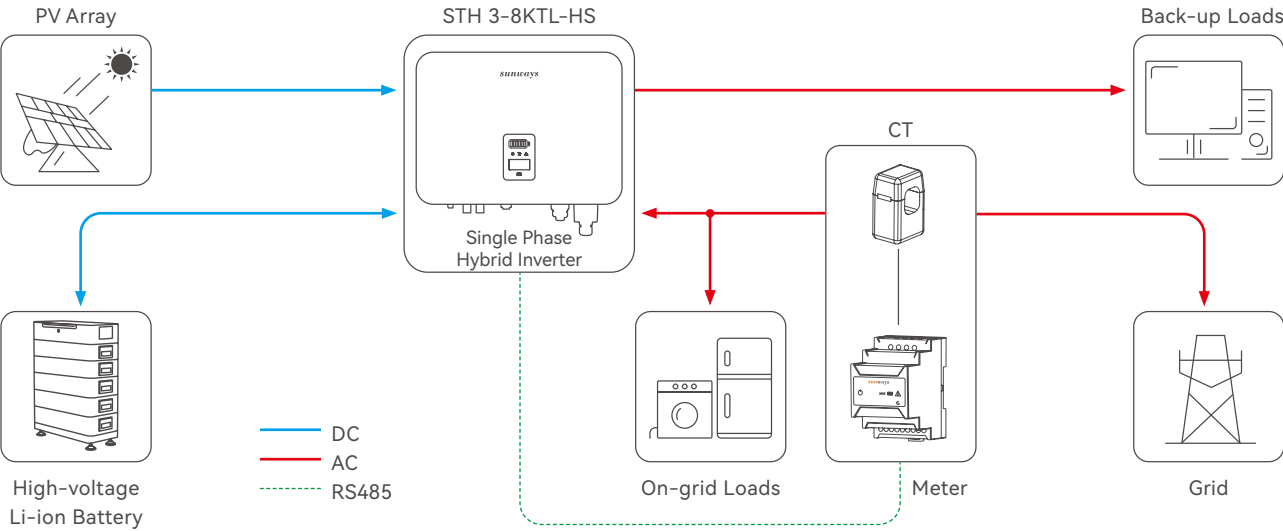
General Data	
Over Voltage Category	DC : II ; AC : II
Dimensions (mm)	483*374*206
Weight (KG)	20 / 21
Protection Degree	IP66
Self-consumption at Night (W)	< 15
Topology	Transformerless
Operating Temperature Range (°C)	-20~60
Relative Humidity (%)	0~100
Operating Altitude (m)	3000
Cooling	Natural Convection / Fan
Noise Level (dB)	<30 / <45
Display	TFT3.5 LCD/ OLED
Communication	WiFi/GPRS/LAN(Optional)

① 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.

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- Max. Efficiency up to 97.6%.
- With AC output ranging from 3kW to 8kW.
- Powerful load adaptability, support loads stable access.
- Fast and easy data checking and commissioning via App or OLED display.
- Wide battery voltage range allows more battery modules connection and increases self consumption rate.
- Fast charging/discharging of up to 30A to meet the demand of higher consumption and energy trading.
- Up to 15A 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.



Model	STH-3KTL-HSS	STH-3.6KTL-HSS	STH-4.2KTL-HS	STH-4.6KTL-HS	STH-5KTL-HS	STH-6KTL-HS	STH-7KTL-HS	STH-8KTL-HS
Max. Input Power (W)	4,800	5,760	6,720	7,360	8,000	9,600	11,200	12,800
Start-up Voltage (V)	80	80	80	80	80	80	80	80
Max. DC Input Voltage (V)	600	600	600	600	600	600	600	600
Rated DC Input Voltage (V)	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
Number of MPP Trackers	1	1	2	2	2	2	2	2
Number of DC Inputs per MPPT	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
Max. Short-circuit Current (A)	20	20	20/20	20/20	20/20	20/20	20/20	20/20

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

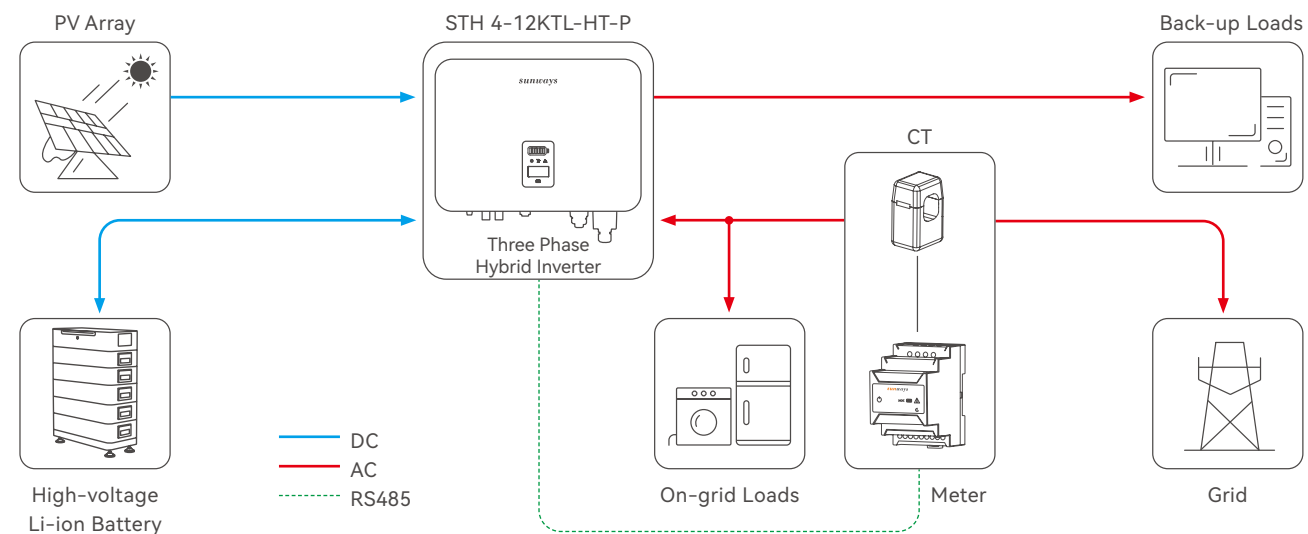
Rated Output Power (W)**	3,000	3,600	4,200	4,600	5,000	6,000	7,000	8,000
Max. Output Power (W)	3,300	3,960	4,600	4,600	5,500	6,600	7,700	8,000
Max. Apparent Power (VA)	3,300	3,960	4,600	4,600	5,500	6,600	7,700	8,000
Max. Input Apparent Power (VA)	6,000 ^①	7,200 ^①	8,400 ^①	9,200 ^①	10,000 ^①	12,000 ^①	12,000 ^①	12,000 ^①
Max. Charging Power of Battery (W)	3,000	3,600	4,200	4,600	5,000	6,000	7,000	8,000
Grid Type (V)**	L/N/PE, 220/230/240V							
Rated AC Frequency (Hz)	50/60							
Max. Output Current (A)	15	18	21	21	25/21.7	28.7	35	36.3
Power Factor	0.8 leading...0.8 lagging							
THDi @ Rated Power	<3%							
DCI	<0.5%In							

Rated Output Power (W)	3,000	3,600	4,200	4,600	5,000	6,000	7,000	8,000
Max. Output Power (W)	3,300	3,960	4,600	4,600	5,500	6,600	7,700	8,000
Back-up Output Rated Apparent Power (VA)	3,000	3,600	4,200	4,600	5,000	6,000	7,000	8,000
Max. Apparent Power (VA)	3,300	3,960	4,600	4,600	5,500	6,600	7,700	8,000
Back-up Output Rated Current (A)	13	15.7	18.3	20	21.7	26.1	31.8	36.3
Max. Output Current (A)	15	18	21	21	25/21.7	28.7	35	36.3
UPS Switching Time (ms)	<10							
Grid Type (V)	L/N/PE, 220/230/240							
Rated AC Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Peak Output Apparent Power (VA)	3,900 ^② , 60s	4,700 ^② , 60s	5,500 ^② , 60s	6,000 ^② , 60s	6,500 ^② , 60s	7,800 ^② , 60s	9,100 ^② , 60s	10,000 ^② , 60s
THDi @ Rated Power	<3%							

Max. Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
Euro Efficiency	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%
Max. Battery Discharge Conversion Efficiency	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%	96.6%

Protection		General Data	
DC Reverse Polarity Protection	Integrated	Over Voltage Category	PV : II ; Main : III
Battery Input Reverse Connection Protection	Integrated	Dimensions [W*H*D] (mm)	550*410*175
Insulation Resistance Detection	Integrated	Weight (kg)	26
DC Switch	Optional	Protection Degree	IP65
Surge Protection	Integrated	Self-consumption at Night (W)	< 15
Over-temperature Protection	Integrated	Topology	Transformerless
Residual Current Protection	Integrated	Operating Temperature Range (° C)	-30~60
Anti-islanding Protection	Integrated	Relative Humidity (%)	0~100
AC Over-voltage Protection	Integrated	Operating Altitude (m)	4000 (derating > 3000)
Overload Protection	Integrated	Cooling	Natural Convection
AC Short-circuit Protection	Integrated	Noise Level (dB)	< 25
		Display	OLED & LED
		Communication	WiFi / LAN (Optional)

① 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.
② 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.

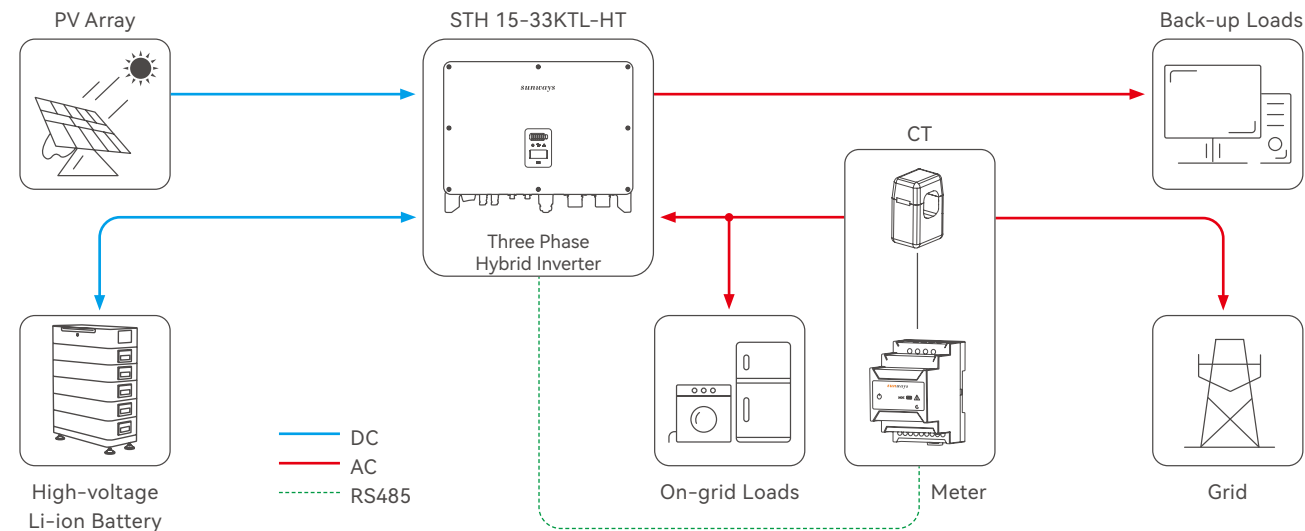


Protection	
DC Reverse Polarity Protection	Integrated
Battery Input Reverse Connection Protection	Integrated
Insulation Resistance Detection	Integrated
DC Switch	Optional
Surge Protection	Integrated
Over-temperature Protection	Integrated
Residual Current Protection	Integrated
Anti-islanding Protection	Integrated
AC Over-voltage Protection	Integrated
Overload Protection	Integrated
AC Short-circuit Protection	Integrated

General Data	
Dimensions [W*H*D] (mm)	550*410*175
Weight (kg)	26~28
Protection Degree	IP65
Self-consumption at Night (W)	< 15
Topology	Transformerless
Operating Temperature Range (° C)	-30~60
Relative Humidity	0~100%
Operating Altitude (m)	4000 (derating > 3000)
Cooling	Natural Convection
Noise Level (dB)	< 25
Display	OLED & LED
Communication	WiFi / LAN (Optional)

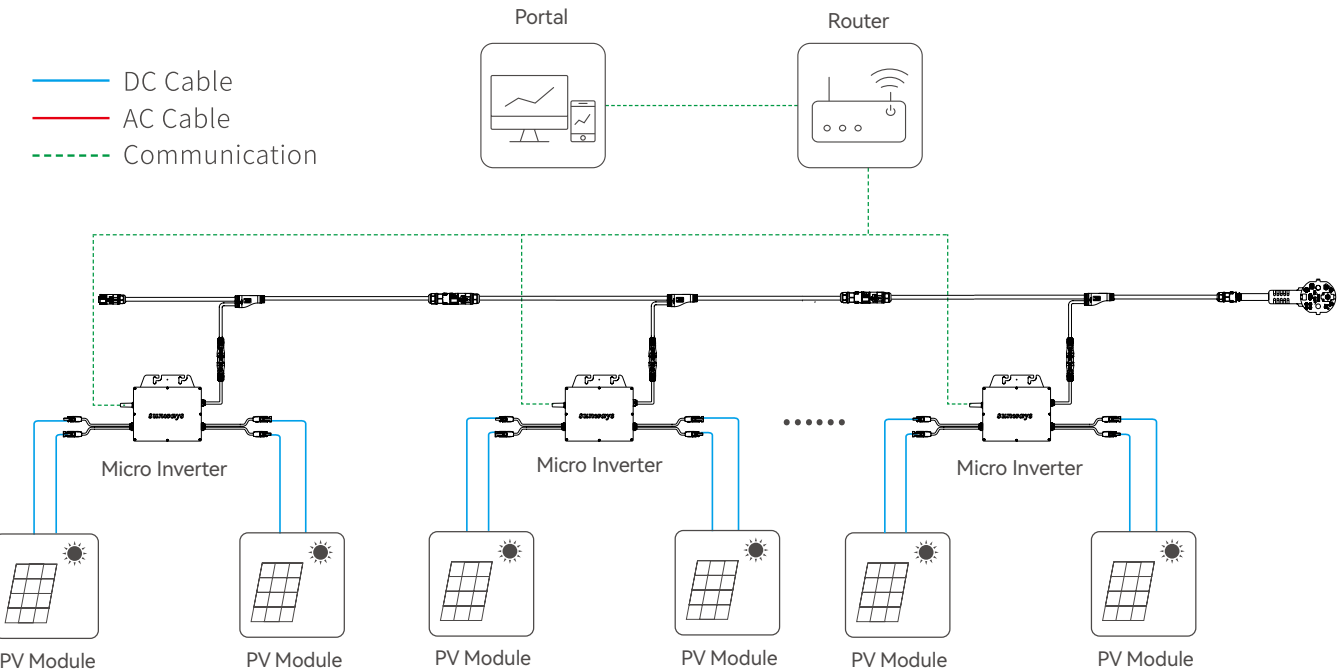
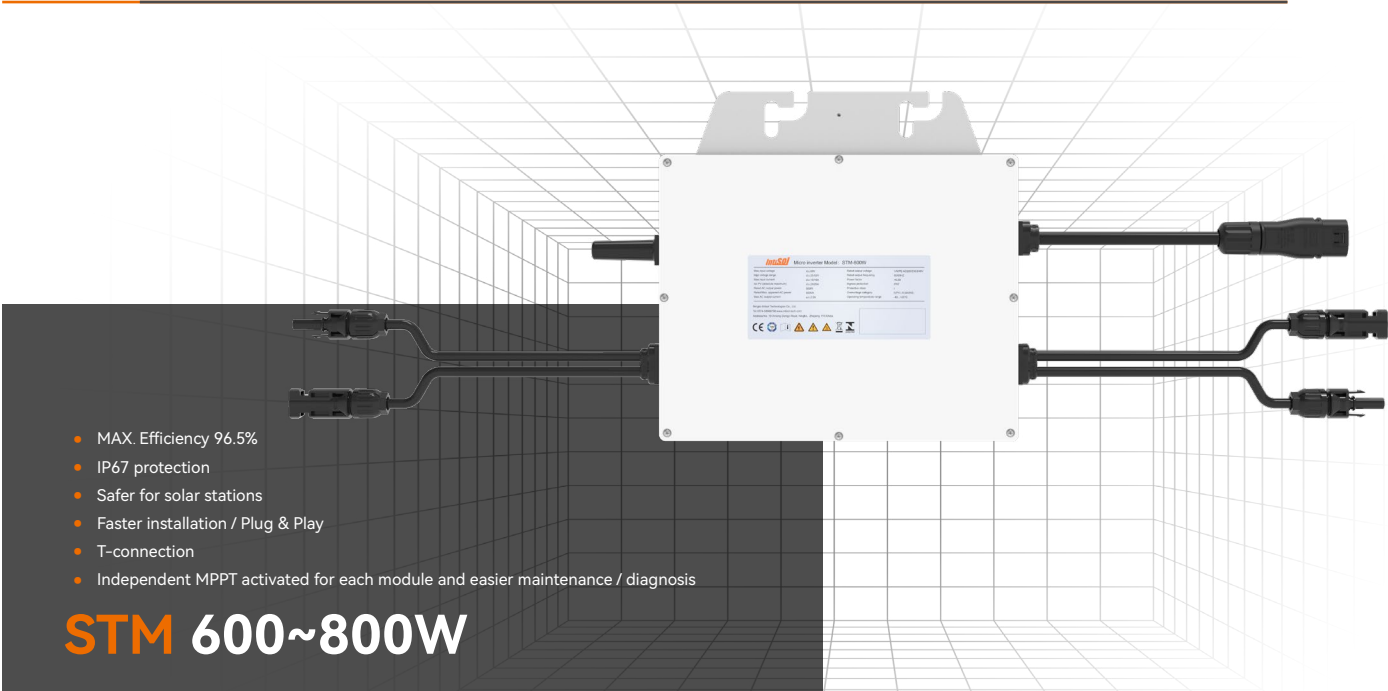
- ① STH-4K~12KTL-HT series maximum input current per string is 16A, products deliver upon the order.
- ② Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery.
- ③ The output power will exceed the rated value only when the power in the PV array is sufficient, and the duration of the overload is relating to the overload power.
- ④ Only one of the three phases can reach up to 1.25 times, and the other two phases should be less than 1.1.

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



Protection		General Data	
DC Reverse Polarity Protection	Integrated	Over Voltage Category	PV: II , Main: III
Battery input reverse connection protection	Integrated	Dimensions [W*H*D] (mm)	640*490*290
Insulation Resistance Detection	Integrated	Weight (kg)	48
DC Switch	Optional	Protection Degree	IP66
Surge Protection	Integrated	Self-consumption at Night (W)	<15
Over-temperature Protection	Integrated	Topology	Transformerless
Residual Current Protection	Integrated	Operating Temperature Range (° C)	-30~60
Anti-islanding protection	Integrated	Relative Humidity (%)	0~100
AC Over-voltage Protection	Integrated	Operating Altitude (m)	3000
Overload protection	Integrated	Cooling	Smart Fan Cooling
AC Short-circuit Protection	Integrated	Noise Level (dB)	<50
		Display	OLED & LED
		Communication	WiFi/LAN (Optional)

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



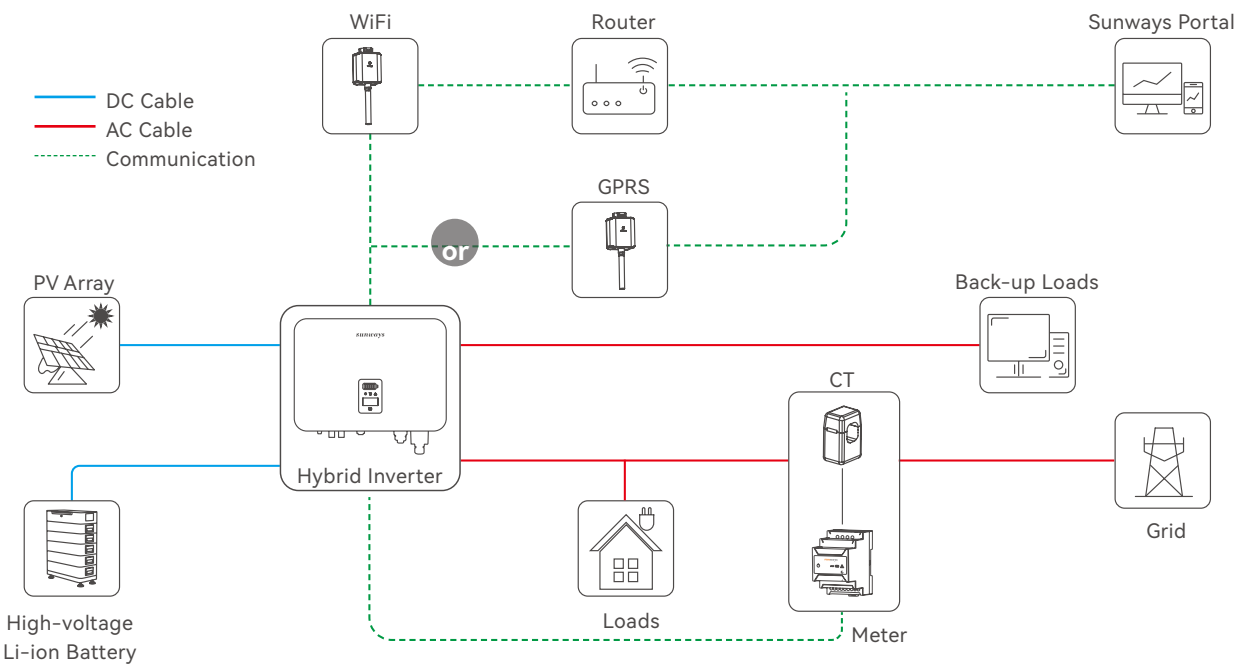
Model	STM-600W	STM-800W
PV Input		
Recommended PV Module Power (Wp)	320-450 (2 Piece)	360-550 (2 Piece)
Max. Input Voltage (V)	60	
Start up Voltage (V)	16	
MPPT Voltage Range (V)	25-55	
Max. Input Current (A)	15/15	15/15
Max. Short Current (A)	20/20	20/20
AC Output		
Rated AC power (W)	600	800
Max. /Rated Apparent AC power (VA)	600	800
Rated Grid Voltage (AC Voltage Range) (V)	220/230/240	
Rated Grid Frequency (Hz)	50/60	
Max. AC Output Current (A)	2.70	3.60
Power Factor	>0.999	
Total Harmonic Distortion (THDi@Rated Power)	<3%	
Grid Connection	L/N/PE	
Efficiency		
MPPT Efficiency (%)	>99.9%	
Max. Efficiency (%)	96.50%	
Protection		
Anti-islanding Protection	Integrated	
PV Input Reverse Polarity Protection	Integrated	
Output over Current Protection	Integrated	
Output Short Protection	Integrated	
Over Voltage Protection	DC:II / AC:III	
General Data		
Dimensions [W*H*D] (mm)	226*220*33	
Weight (kg)	2.8	
Noise Emmison (dB)	≤ 20	
User Interface	LED	
DC Connection Type	MC4	
AC Connection Type	Plug-in connector	
Communication	Wi-Fi	
Cooling Method	Natural convection	
Operating Ambient Temperature Range (°C)	-40°C ---+65°C	
Allowable Relative Humidity Range (%)	0-100	
Max. Operating Altitude (m)	3000 (>3000 derating)	
Protection Degree	IP67	
Climatic Category (IEC 60721-3-4)	4K4H	
Topology	High frequency isolated	
Power Consumption at Night (mW)	< 50	
Inrush Current	9.8A peak@0.3ms	
Max. Inverter Backfeed Current to the Array (A)	0	
Standard		
Safety	IEC62109-1 / IEC62109-2 / IEC61727	
EMC	EN 61000-6-1 / EN 61000-6-2 / EN 61000-6-3	
Cetification	VDE0126-1-1, VDE 4105	



- Stack installation, time and cost-saving
- Longer cycle life battery(6,000 cycles)
- Support remote diagnosis & upgrade
- Charge your battery within one hour
- Optional battery capacity ranges from 5.12~20.48kWh
- Perfect match up with both residential and commercial inverter

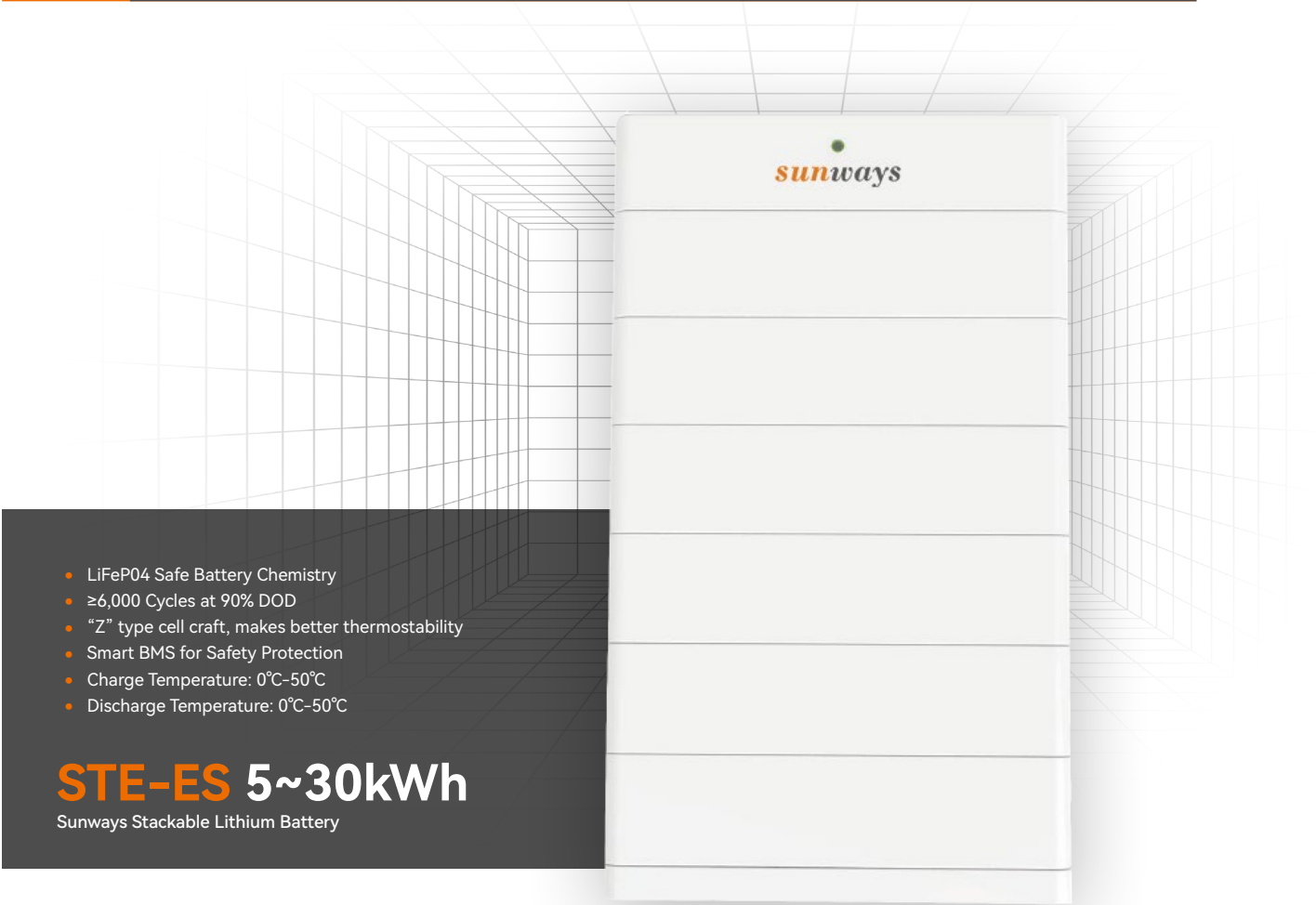
STE-BS 5~20kWh

Sunways Stackable Lithium Battery



Model	STE-BS5	STE-BS7	STE-BS10	STE-BS12	STE-BS15	STE-BS17	STE-BS20
Battery Usable Energy (kWh)	5.12	7.68	10.24	12.8	15.36	17.92	20.48
Battery Capacity (Ah)	50	50	50	50	50	50	50
Nominal Voltage (V)	102.4	153.6	204.8	256	307.2	358.4	409.6
Maximum Charge/Discharge Current (A)	50	50	50	50	50	50	50
Recommend Continuous Charge/Discharge Current (A)	25	25	25	25	25	25	25
Weight (kg)	74.5	101.6	128.7	155.8	182.9	210	237.1
Dimension[W*H*D] (mm)	708*497*315	708*634*315	708*771*315	708*908*315	708*1045*315	708*1182*315	708*1319*315
Protection Degree	IP54						
Cycle Life	6,000 cycles @ 90%DOD						
Operating Temperature Range (℃)	0~50						
Storage Temperature (℃)	0~35						
Relative Humidity	≤ 95%						
Altitude (m)	2000						
Internal Battery Module	STE-P2560						
Module Connection	Series / Hard Connection with Positioner						
Installation Method	Stackable						
Number of Modules	2	3	4	5	6	7	8
Communication Protocol/Connector Type	CAN/RJ45						

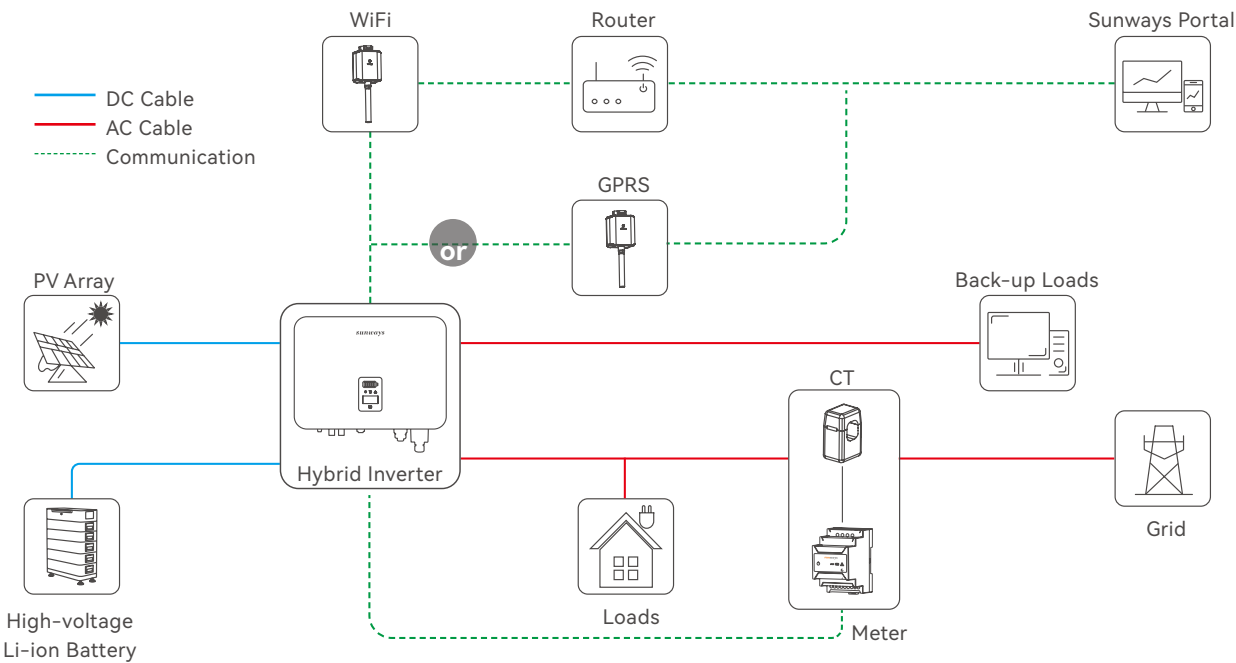
- Standard operating temperature for batteries is 25° C
- STH 3~8KTL-HS series suitable battery range from STE-BS5-BS20
- STH 4~12KTL-HT series suitable battery range from STE-BS7-BS20
- STH 15~33KTL-HT series suitable battery range from STE-BS10-BS20



- LiFeP04 Safe Battery Chemistry
- ≥6,000 Cycles at 90% DOD
- “Z” type cell craft, makes better thermostability
- Smart BMS for Safety Protection
- Charge Temperature: 0°C-50°C
- Discharge Temperature: 0°C-50°C

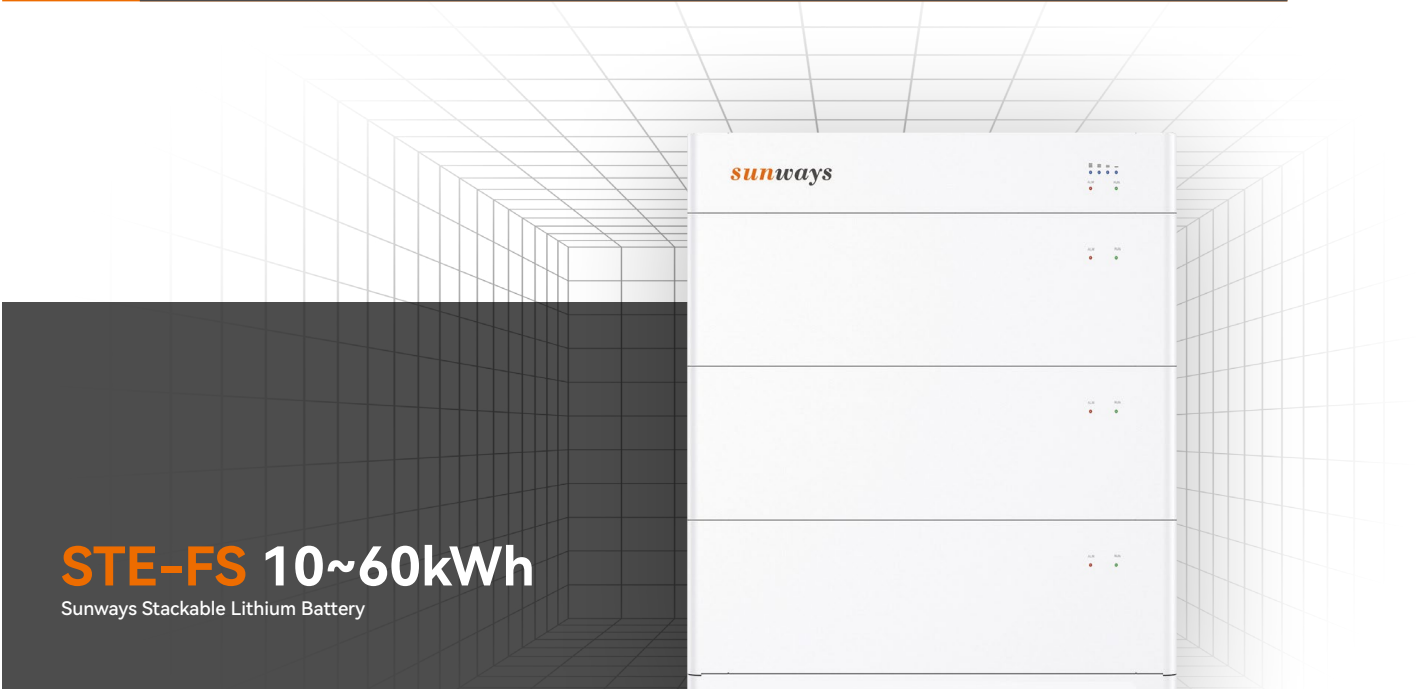
STE-ES 5~30kWh

Sunways Stackable Lithium Battery



Model	STE-ES5	STE-ES10	STE-ES15	STE-ES20	STE-ES25	STE-ES30
Battery Usable Energy (kWh)	5.12	10.24	15.36	20.48	25.60	30.72
Battery Capacity (Ah)	50	50	50	50	50	50
Nominal Voltage (V)	102.4	204.8	307.2	409.6	512	614.4
Maximum Charge/Discharge Current (A)	50	50	50	50	50	50
Recommend Continuous Charge/Discharge Current (A)	25	25	25	25	25	25
Weight (kg)	73	119	165	211	257	303
Dimension [W*H*D] (mm)	700*365*430	700*530*430	700*695*430	700*860*430	700*1025*430	700*1190*430
Protection Degree	IP54					
Cycle Life	6,000 cycles @90% DOD					
Operating Temperature Range(° C)	0~50					
Storage Temperature(° C)	0~35					
Relative Humidity	≤ 95%					
Altitude (m)	2000					
Internal Battery Module	STE-P5120					
Module Connection	Series / Hard Connection with Positioner					
Installation Method	Stackable					
Number of Modules	1	2	3	4	5	6
Communication Protocol/Connector Type	CAN/RJ45					

- Standard operating temperature for batteries is 25° C
- STH 3~8KTL-HS series suitable battery range from STE-ES5-ES20
- STH 4~12KTL-HT series suitable battery range from STE-ES10-ES30
- STH 15~33KTL-HT series suitable battery range from STE-ES10-ES30



STE-FS 10~60kWh

Sunways Stackable Lithium Battery



Safer

Cobalt Free Lithium Iron Phosphate(LFP)Battery, safety and long lifespan, high efficiency and high-power density. Intelligent BMS, providing complete protection.



Reliable

Support high discharge power, module level Auto-balancing, under-voltage Automatic Restart.



Flexible

Modular design, easy to expand, Max capacity of 61.44 kWh. Suited to residential and commercial applications for increasing the self consumption ratio.



Convenient

Battery module auto networking, Automatic IP addressing, easy maintenance, remotely monitoring and upgrade, support USB drive upgrade the firmware.



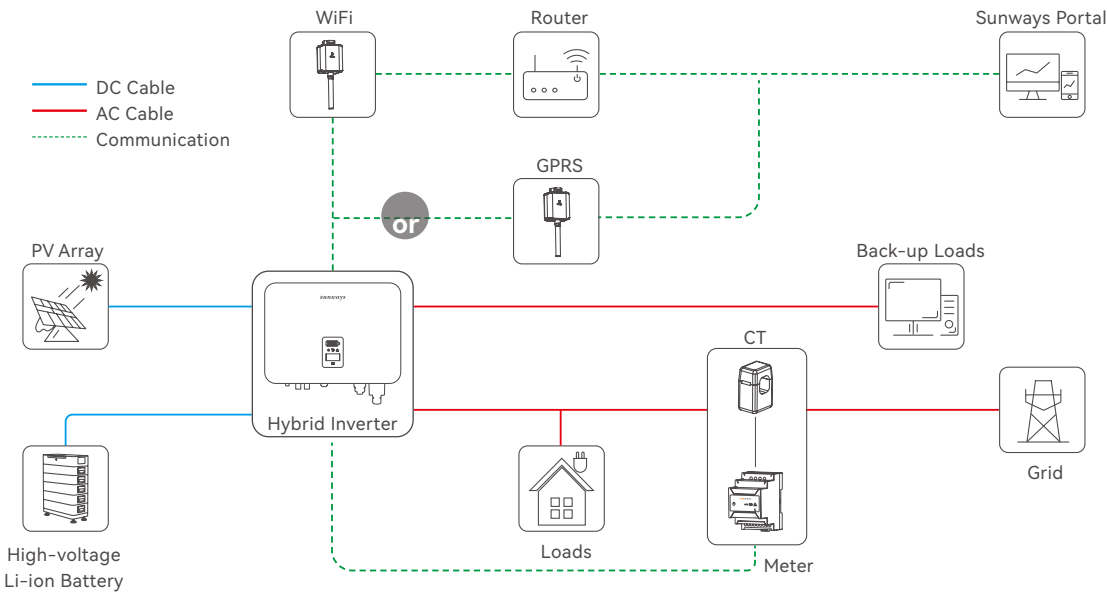
Eco-Friendly

Use environmental protection materials, the whole module non-toxic, pollution-free.



Floor-stand

Free stand design, floor-mounted, saving installation space.



Model	STE-FS10	STE-FS20	STE-FS30	STE-FS40	STE-FS50	STE-FS60
Battery Usable Energy (kWh)	10.24	20.48	30.72	40.96	51.2	61.44
Battery Capacity (Ah)	100	100	100	100	100	100
Nominal Voltage (V)	102.4	204.8	307.2	409.6	512	614.4
Maximum Charge/Discharge Current (A)	70	70	70	70	70	70
Recommend Continuous Charge/Discharge Current (A)	50	50	50	50	50	50
Weight (kg)	105	194	283	372	461	550
Dimension [W*D*H](mm)	720*420*455	720*420*750	720*420*1045	720*420*1340	720*420*1635	720*420*1930
Protection Degree	IP65					
Cycle Life	6,000 cycles @90% DOD					
Operating Temperature Range (° C)	0~50					
Storage Temperature (° C)	0~35					
Relative Humidity	≤ 95%					
Altitude (m)	2000					
Internal Battery Module	STE-P10240					
Module Connection	Series / Hard Connection with Positioner					
Installation Method	Stackable					
Number of Modules	1	2	3	4	5	6
Communication Protocol/Connector Type	CAN/RJ45					

·Standard operating temperature for batteries is 25° C
·STH 3~8KTL-HS series suitable battery range from STE-FS10-FS40
·STH 4~12KTL-HT series suitable battery range from STE-FS20-FS50
·STH 15~33KTL-HT series suitable battery range from STE-FS20-FS50



STE-NS16
51.2V 320AH
Sunways Free Stand Lithium Battery



Support both WiFi and Bluetooth configurations for greater adaptability.



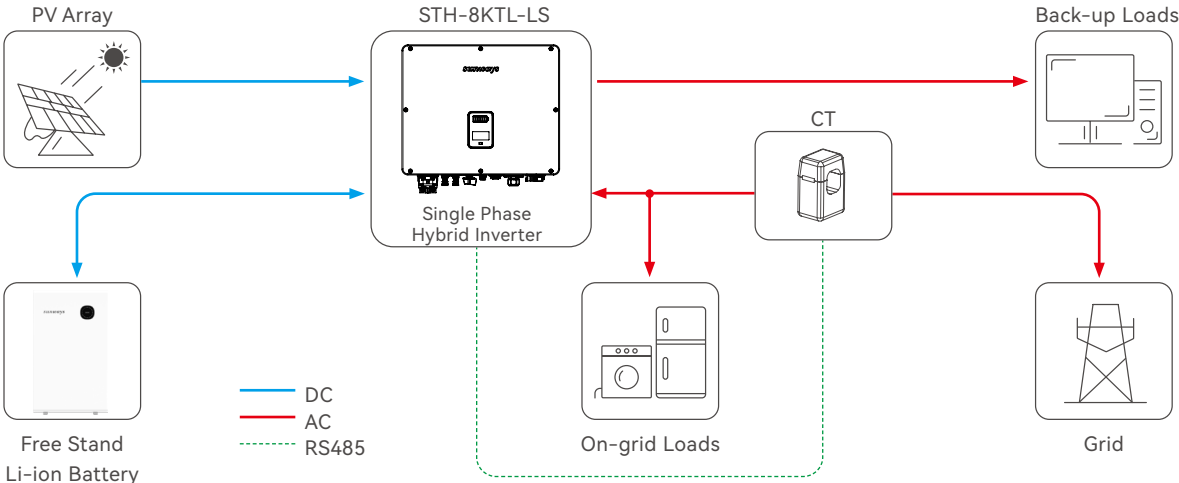
Long life >6000 cycles.



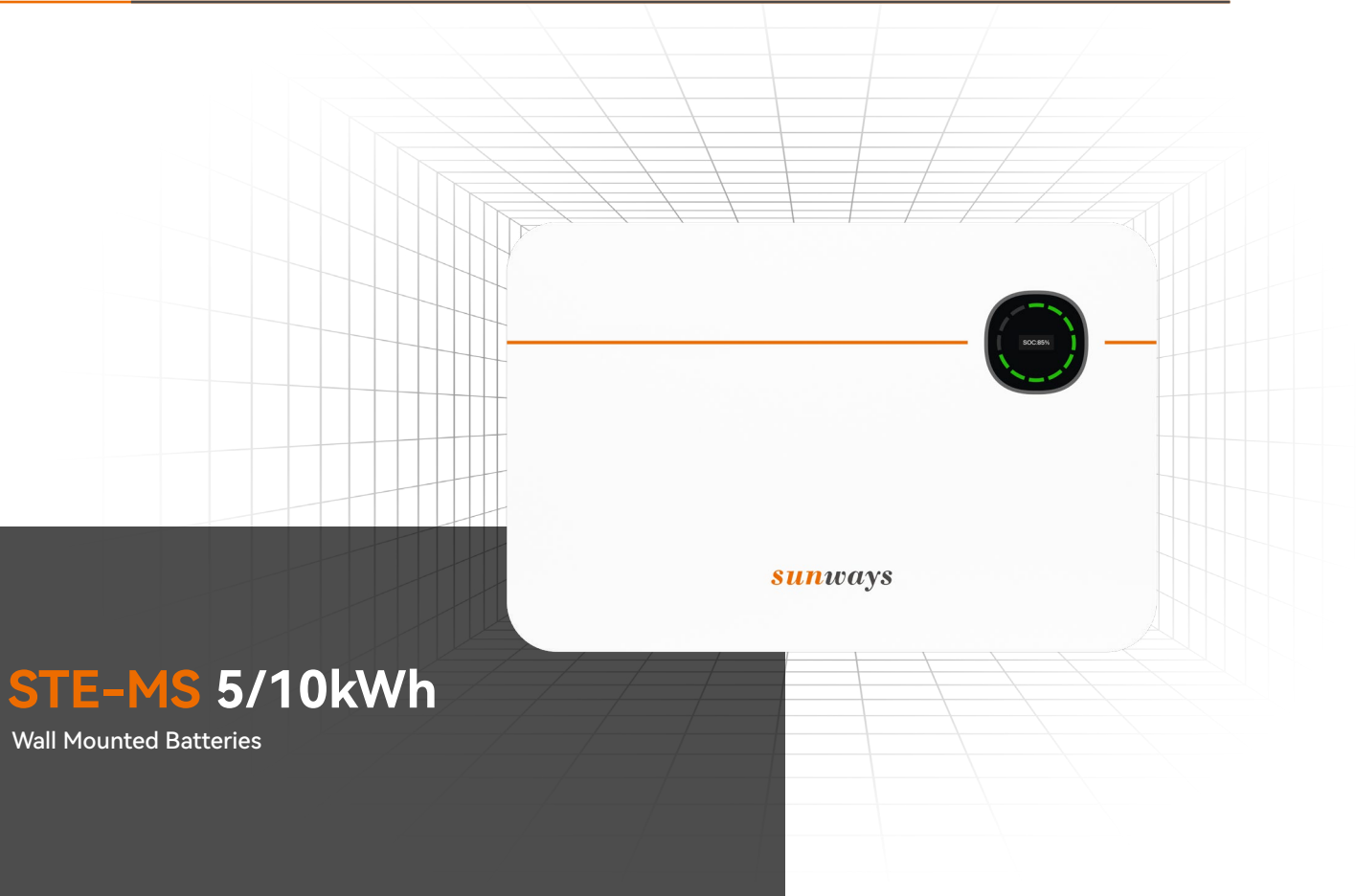
Plug and play format for easy installation.



The use of the most advanced lithium iron phosphate battery core technology.



Model	STE-NS16
Battery Type	51.2V 320 AH LiFePO4
Nominal Energy (kWh)	16.4
Usable Energy (kWh)	14.8
Peak Output Power(KW,10Seconds)	15.4
Round-Trip Efficiency	≥ 97.5%
Nominal Voltage(V)	51.2V
Operating Voltage(V)	44~58.4
Max Charge / Discharge Current (A)	200/200
Communication	CAN,RS485
Enclosure Protection Rating	IP21
Operating Temperature(℃)	-20~60
Cooling Type	Natural Cooling
Installation	Free Stand,Indoor
Cycles Life	>6,000(25℃)
Recommend DOD	90%
Dimension (W*H*D,mm)	573*981*168
Weight(Kg)	130
Humidity	5%-95%
Altitude(m)	<2,000
Warranty	5 Years
Safety Standard	UL1973/IEC62619/UN38.3



Safety LiFePO4
LFP Baftery Chemistry



Easy Installation
Plug and Play



Wall Mounted
Upto 16 Units in Parallel



Stable &Reliable
Smart BMS



Long Battery Life
>6,000 Cycles Life (90% DOD)



Widely Compatible
Compatible with Mainstream
Inverters

Model	STE-MS5	STE-MS10
Battery Type	51.2V 100Ah LiFePO4	51.2V 200Ah LiFePO4
Nominal Energy(kWh)	5.1	10.2
Usable Energy(kWh)	4.6	9.2
Peak Output Power (KW, 10Seconds)	7.7	10.2
Round-Trip Efficiency	97.5%	
Nominal Voltage(V)	51.2V	
Operating Voltage(V)	44-58.4	
Max Charge/Discharge Current(A)	100	150
Communication	CAN,RS485	
Enclosure Protection Rating	IP21	
Operating Temperature (° C)	-20-60	
Cooling Type	Natural Cooling	
Installation	Wall Mounted, Indoor	
Cycles Life	>6,000(25C)	
Recommend DOD	90%	
Dimension (W*H*D, mm)	650*430*155	780*540*155
Weight (kg)	48	88
Humidity	5%-95%	
Altitude(m)	<2,000	
Warranty	5 Years	
Scalability	Max 16 Pcs in Parallel	

- Monitoring of up to 90 devices
- Support of RS485, Ethernet, WiFi and GPRS communication
- Support of energy meter, meteo station, sensors and other equipment access
- Active and reactive power control
- 100% data availability through 24/7 operations
- Inverter batch parameter setting and firmware updates
- Plant maintenance by remote Web access, optimized OPEX

ST-Logger



Technical Parameters

General Data		Environmental Data	
Max. number of Inverters	90 (30/RS485 Port)	Operating Temperature (°C)	-10~+60
Preference Setting	Remote Web / APP	Operating Humidity	0%-90% relative humidity, no condensation
Firmware Upgrade	Wireless upgrade	Operating Altitude (m)	≤ 4000
Working Voltage (V)	DC 12	Storage Temperature (°C)	-40~+85
Power Consumption (W)	< 10	Storage Humidity	< 40%
		Protection Degree	IP20

Interface Specification	
RS485 Interface	4 ports (3 ports for inverters connection, 1 port for other devices connection), Baud 9600bps (Adjustable from 1200-57600 bps)
Ethernet Interface	1 port, 10/100Mbps Self-adaptive
Wireless Interface	WiFi/GPRS Alternative
Output Dry Contact	Two independent dry contacts, 230V/1A
Other Interface	CAN/USB/SD/SIM
Wireless Data	
WiFi Transmitting Power	802.11b: +16 +/-2dBm (@11Mbps)、802.11g: +14 +/-2dBm (@54Mbps)、802.11n: +13 +/-2dBm (@HT20, MCS7)
WiFi Receiving Sensitivity	802.11b: -87 dBm (@11Mbps , CCK)、802.11g: -73 dBm (@54Mbps, OFDM)、802.11n: -71 dBm (@HT20, MCS7)
WiFi Operating Frequency (GHz)	2.412-2.484
Communication Distance (m)	100 (without obstacles)

- Plug and play 1s installation
- Metal body, beautiful and long durable
- Easy to configure with Sunways Monitoring App
- Support local and remote monitoring
- IP65, for both indoor and outdoor installation
- Enable mobile monitoring at anytime anywhere

WIFI MODULE





Technical Parameters

General Data	
Max. number of Inverters	1
Inverter Communication	USB3.0
Remote Communication	WIFI (802.11 b/g/n)
Serial Port Communication Rate (bps)	115200
Communication Distance (m)	100 (without obstacles)
External Antenna	SMA water-proof glue stick antenna
Data Intervals	Remote configuration available
Preference Setting	Remote Web, APP
Data Access	Remote server
Working Voltage (V)	DC 5
Working Current (mA)	80 (200 Peak)
Wireless Data	
WiFi Transmitting Power	802.11b: +16 +/-2dBm (@11Mbps), 802.11g: +14 +/-2dBm (@54Mbps), 802.11n: +13 +/-2dBm (@HT20, MCS7)
WiFi Receiving Sensitivity	802.11b: -87 dBm (@11Mbps ,CCK), 802.11g: -73 dBm (@54Mbps, OFDM), 802.11n: -71 dBm (@HT20, MCS7)
WiFi Operating Frequency (GHz)	2.412-2.484
Environmental Data	
Operating Temperature (°C)	-10~+60
Operating Humidity	0%-90% relative humidity, no condensation
Storage Temperature (°C)	-40~+85
Storage Humidity (%)	< 40
Protection Degree	IP65
Other Data	
Dimensions [L*W*H] (mm)	156*52*30
Weight (g)	130
Warranty (years)	2



- Metal body, beautiful and long durable
- Plug and play 1s installation, no need to set
- Support local and remote monitoring
- IP65, for both indoor and outdoor installation
- External SIM card slot, easier for SIM card replacement
- External antenna, stronger signal and reliable communication
- Enable mobile monitoring at anytime anywhere

GPRS MODULE

Technical Parameters

General Data	
Max. number of Inverters	1
Inverter Communication	USB3.0
External Antenna	SMA water-proof glue stick antenna
Data Intervals	Remote configuration available
Preference Setting	Remote Web, APP
Data Access	Remote server
Working Voltage (V)	DC 5
Working Current (mA)	130 (600 Peak)
Wireless Data	
WirelessTransmitting Power (dbm)	GSM850/EGSM900: 5~32.5, DCS1800/PCS1900: 0~29.5
Wireless Receiving Sensitivity (dBm)	< -108.5
Wireless Operating Frequency	GSM850, EGSM900, DCS1800, PCS1900
GPRS Connection Features	GPRS multi-slot class is 10 (default), GPRS mobile station class B
Environmental Data	
Operating Temperature (℃)	-10~+60
Operating Humidity (%)	0-90 relative humidity, no condensation
Storage Temperature (℃)	- 40~+85
Storage Humidity	< 40%
Protection Degree	IP65
Other Data	
Dimensions [L*W*H] (mm)	156*52*30
Weight (g)	140
Warranty (years)	2



- Plug and play 1s installation
- Data encrypted to ensure data security
- Supports breakpoint retransmission
- Remote upgrade available
- Stable and reliable data transmission via wired internet cable
- Default dynamic IP mode and static IP commissioning available

LAN MODULE

Technical Parameters

General Data	
Max. number of Inverters	1
Inverter Communication	USB3.0
Remote Communication	IEEE802.3 10
Serial Port Communication Rate (bps)	115200
MAX. Communication Distance (m)	100
Data Intervals	Remote configuration available
Preference Setting	Remote Web, APP
Data Access	Remote server
Working Voltage (V)	DC 5
Working Current (mA)	100 (220 Peak)
Environmental Data	
Operating Temperature (℃)	-30~+75
Operating Humidity	0%-90% relative humidity, no condensation
Storage Temperature (℃)	-40~+85
Storage Humidity	< 40%
Protection Degree	IP65
Other Data	
Dimensions [L*W*H] (mm)	116*52*30
Weight (g)	100
Warranty (years)	2



- Export limitation & control
- Various models of CT are available
- Compatible with various grid types
- High current measurement precision

SMART METER

Technical Parameters

Model		STM
Voltage Range (V)		85~280
Frequency (Hz)		50/60
Rated Current (A)		90A/120A/300 (With CT)
Self-consumption (W)		<3
Data Detection		Current/Voltage/Active Power/Reactive Power/Power Factor/Frequency
Calculated Value		Power Factor/Bidirectional Active/Reactive Power Energy
Precision	Active Power	Class 1 (IEC 62053-22)
	Reactive Power	Class 1 (IEC 62053-23)
Communication		Modbus RTU (RS485)
Interface		3 LED, Reset Button
Mechanical Parameters	Terminal capacity (mm ²)	0.5~4 (Copper Core Wire)
	Size [L*W*H] (mm)	85*54*75
	Weight (g)	150
	Protection Degree	IP20 (For Indoor Use)
	Installation Method	35mm DIN Rail
Operating Temperature (° C)		-25 ~ +60
Operating Humidity		<95%, No Condensation
Altitude (m)		<2500



- Export limitation & control
- Various models of CT are available
- Compatible with various grid types
- High current measurement precision
- 24/7 Real-time consumption monitoring
- Integrated features of WiFi/LAN/RS485

SMART METER

Technical Parameters

Model		STK
Voltage Range (V)		85~280
Frequency (Hz)		50/60
Rated Current (A)		90A/120A/300 (With CT)
Self-consumption (W)		<5
Data Detection		Current/Voltage/Active Power/Reactive Power/Frequency
Calculated Value		Power Factor/Bidirectional Active/Reactive Power
Precision	Active Power	Class 1 (IEC 62053-22)
	Reactive Power	Class 1 (IEC 62053-23)
Communication		Modbus RTU (RS485), WiFi/LAN/Bluetooth
Interface		5 LED, Reset Button
Mechanical Parameters	Terminal capacity (mm ²)	0.5~4 (Copper Core Wire)
	Size [L*W*H] (mm)	85*54*75
	Weight (g)	150
	Protection Degree	IP20 (For Indoor Use)
	Installation Method	35mm DIN Rail
Operating Temperature (° C)		-25 ~ +60
Operating Humidity		<95%, No Condensation
Altitude (m)		<2500
Parallel Connection		Optional

sunways



WeChat



Sunways Portal