

# ***sunways***

Sunways Single Phase with Dual MPPT  
STS-3K/3.6K/4.2K/4.6K/5K/6KTL

**MAX 98.5% EFFICIENCY**

**IP65 PROTECTION**



## **Safe & Reliable**

- High reliability due to good heat dissipation design
- IP65, wider working temperature and altitude, adapt to various installation environments
- Integrated lightening 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. 98.5% efficiency
- European weighted efficiency 97.6%
- Wide MPPT voltage range
- Up to 10% continuous output overloading capacity
- Dual MPPT design with precise MPPT algorithm
- Standard 5 years warranty, extendable to 10 or 15 years



## **Easy to use**

- Compact elegant design, light weight, one-person installation
- Plug and play connectors, 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

## SINGLE PHASE:STS-3K/3.6K/4.2K/4.6K/5K/6KTL

Model	STS-3KTL	STS-3.6KTL	STS-4.2KTL	STS-4.6KTL	STS-5KTL	STS-6KTL
<b>Input</b>						
Max DC power for single MPPT	3,500	3,500	3,500	3,500	3,500	3,500
Start-up Voltage (V)	120	120	120	120	120	120
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)	12.5/12.5	12.5/12.5	12.5/12.5	12.5/12.5	12.5/12.5	12.5/12.5
Max. Short-circuit Current (A)	15/15	15/15	15/15	15/15	15/15	15/15
<b>Output</b>						
Rated Output Power (W)	3,000	3,600	4,200	4,600	5,000	6,000
Max. Output Power (W)	3,300	3,680	4,600	4,600	5,500 *	6,600
Max. Apparent Power (VA)	3,300	3,680	4,600	4,600	5,500 *	6,600
Rated Output Voltage (V)	220/230					
Rated AC Frequency (Hz)	50/60Hz 45-55Hz/55-65Hz					
Max. Output Current (A)	15	16	21	21	25 **	28.7
Power Factor	0.8 leading ...0.8 lagging					
Max. Total Harmonic Distortion	<3% @Rated Output Power					
DCI	<0.5%In					
<b>Efficiency</b>						
Max. Efficiency	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%
European Efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
MPPT Efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
<b>Protection</b>						
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	Integrated					
AC Short-circuit Protection	Integrated					
AC Over-voltage Protection	Integrated					
<b>General Data</b>						
Dimensions (mm)	410W*360H*120D					
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)	4000 (derating@ > 3000)					
Cooling	Natural Convection					
Noise Level (dB)	< 25					
Display	OLED & LED					
Communication	RS485, WiFi/GPRS/LAN (Optional)					
Compliance	G98, G99, NB/T32004, IEC62109, IEC62116, VDE4105, VDE0126, UTE C15-712-1, AS4777, C10/11, CEI0-21, RD1699, NBR16149, IEC61727, IEC60068, IEC61683, EN50549, EN61000					

\*The range of AC grid voltage and frequency depends on local standards

\*The PV Designer shall consider the following if he wants to use SUNWAYS On-grid inverter to be under warranty

1. Limits on the voltage: The minimum and maximum values of the output voltage of the photovoltaic Panels (PV) under the operating conditions must be contained in the range of MPPT of inverter, also the maximum voltage produced by the (PV) must be less than the maximum voltage allowable from the inverter. The maximum voltage of the (PV) is the string voltage at the minimum operating temperature of the (PV)
2. Limits on the current: The short-circuit current of the photovoltaic Panels must be less than the maximum current permissible by the inverter
3. In case of using more value than the value that shown as The Max PV configuration in the Jordanian DATA Sheet, it shall take a written approval from our agent in Jordan