



## 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

# TECHNICAL PARAMETERS

# THREE PHASE:STT-4K~25KTL-P

| 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 <sup>①</sup>                                                                            | 15/15 <sup>①</sup> | 15/15 <sup>①</sup> | 15/15 <sup>①</sup> | 15/15 <sup>①</sup> | 15/15 <sup>①</sup> | 15/30 <sup>①</sup> | 30/30 <sup>①</sup> | 30/30 <sup>①</sup> | 30/30 <sup>①</sup> |
| 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             |
| Rated Apparent Power (VA)         | 4,000                                                                                         | 5,000              | 6,000              | 8,000              | 10,000             | 12,000             | 15,000             | 17,000             | 20,000             | 25000              |
| 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                                                                       |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| AC output rated current (A)       | 6.7                                                                                           | 8.4                | 10                 | 13.3               | 16.5               | 20                 | 25                 | 28.4               | 31.9               | 39                 |
| 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                         | Integrated                                                                                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Surge Protection                  | Integrated                                                                                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Over-temperature Protection       | Integrated                                                                                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Residual Current Protection       | Integrated                                                                                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Anti-islanding Protection         | Integrated, frequency shift                                                                   |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| AC Short-circuit Protection       | Integrated                                                                                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| AC Over-voltage Protection        | Integrated                                                                                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Protective Class                  | Class I                                                                                       |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| 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、AS4777、CEI0-21、IEC61727、IEC60068、IEC61683、EN50549、EN61000 |                    |                    |                    |                    |                    |                    |                    |                    |                    |
| Country Of Manufacturer           | China                                                                                         |                    |                    |                    |                    |                    |                    |                    |                    |                    |

① STT-4~25KTL series maximum input current per string is 11A, products deliver upon the order

**sunways**