

# *sunways*

Sunways Three Phase with Dual MPPT

STT-4K ~ 25KTL-P



MAX 98.6% EFFICIENCY

IP65 PROTECTION



SAFE & RELIABLE

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



HIGH YIELD

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



EASY TO USE

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



| Model                             | STT-4KTL-P   | STT-5KTL-P         | STT-6KTL-P         | STT-8KTL-P         | STT-10KTL-P        | STT-12KTL-P        | STT-15KTL-P        | STT-17KTL-P        | STT-20KTL-P        | STT-25KTL-P        |  |
|-----------------------------------|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--|
| <b>Input</b>                      |  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| 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              |  |
| <b>Output</b>                     |  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| 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             | 25,000             |  |
| Max. Apparent Power (VA)          | 4,400  | 5,500              | 6,600              | 8,800              | 11,000             | 13,200             | 16,500             | 18,700             | 22,000             | 25,000             |  |
| Rated Output Voltage (V)          | 3L/N/PE, 230/400V  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Rated AC Frequency (Hz)           | 50/60Hz 45-55Hz/55-65Hz  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| 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   |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| <b>Efficiency</b>                 |  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| 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%              |  |
| <b>Protection</b>                 |  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| 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   |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| <b>General Data</b>               |  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Dimensions (mm)                   | 550W*410H*175D   |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Weight (KG)                       | 23   |                    |                    |                    |                    | 26                 |                    | 29                 |                    |                    |  |
| Protection Degree                 | IP65   |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Self-consumption at Night (W)     | < 1  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Topology                          | Transformer less   |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Operating Temperature Range (° C) | -30~60   |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Relative Humidity (%)             | 0~100  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Operating Altitude (m)            | 4000 (derating@ > 3000)  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Cooling                           | Natural Convection   |                    |                    |                    |                    |                    |                    | Smart Fan Cooling  |                    |                    |  |
| Noise Level (dB)                  | < 25   |                    |                    |                    |                    |                    |                    | < 40               |                    |                    |  |
| Display                           | OLED & LED   |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Communication                     | RS485, WiFi/GPRS/LAN (Optional)  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Compliance                        | NB/T32004、IEC62109、IEC62116、VDE4105、VDE0126、UTE C15-712-1、AS4777、C10/11、CEI0-21、RD1699、NBR16149、IEC61727、IEC60068、IEC61683、EN50549、EN61000 |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |
| Country Of Manufacturer           | China  |                    |                    |                    |                    |                    |                    |                    |                    |                    |  |

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