## sunways



- 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



High yield with Max. Efficiency 98.6%, European weighted efficiency 98.2%



- Increased PV panels current to 20A and MPPT switching frequency to 20KHz, reducing overall weight
- Up to 10% continuous output overloading capacity





- 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



| 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        |  |
| Backfeed current to the array (A)         | 0                       | 0            | 0                 | 0            | 0            |  |
| 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         |  |
| maximum output fault current (A)          | 118                     | 118          | 118               | 118          | 118          |  |
| naximum output overcurrent protection (A) | 118                     | 118          | 118               | 118          | 118          |  |
| 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                                |                         | I            |                   |              |              |  |
| OC Reverse Polarity Protection            |                         |              | Integrated        |              |              |  |
| nsulation Resistance Protection           | Integrated              |              |                   |              |              |  |
| DC Switch                                 | Optional                |              |                   |              |              |  |
| AFCI                                      | Optional                |              |                   |              |              |  |
| Surge Protection                          | Integrated              |              |                   |              |              |  |
| Over-temperature Protection               | Integrated              |              |                   |              |              |  |
| Residual Current Protection               | Integrated              |              |                   |              |              |  |
| slanding 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                    |              |                   |              |              |  |
| opolating / titradic (iii)                | Fan Cooling             |              |                   |              |              |  |
| Cooling                                   |                         | -            |                   |              |              |  |
| <u> </u>                                  |                         |              |                   |              |              |  |
| Cooling Noise Level (dB) Display          |                         |              | <40<br>OLED & LED |              |              |  |

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