



# SOFAR 25K~50KTLX-G3

25K/30K/33K/36K/40K/45K/50K

## Three-Phase Three to Four MPPTs

- 1.5<sub>DC</sub>** 3/4 MPP trackers with 1.5\*DC overload
- 98.9%** Max. efficiency up to 98.9%
- SPD** Type II SPD for both DC and AC side
- 110%** Longtime 110% AC overload ability
- ☐** Lower start voltage, wide MPPT voltage range
- AFCI** Optional AFCI protection
- I/V** Smart I/V curve scanning
- 🔗** Compatible with 500W+ PV modules
- 🔧** Smart monitoring, remote firmware upgrade
- PID** Optional Anti-PID function

### Datasheet

|                                     | SOFAR<br>25KTLX-G3   | SOFAR<br>30KTLX-G3 | SOFAR<br>30KTLX-G3-A | SOFAR<br>33KTLX-G3 | SOFAR<br>36KTLX-G3 | SOFAR<br>40KTLX-G3 | SOFAR<br>45KTLX-G3     | SOFAR<br>50KTLX-G3 | SOFAR<br>40KTLX-G3-HV                         | SOFAR<br>50KTLX-G3-HV |                        |
|-------------------------------------|--|--------------------|----------------------|--------------------|--------------------|--------------------|------------------------|--------------------|---|-----------------------|------------------------|
| <b>Input (DC)</b>                   |  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Recommended Max. PV input power     | 37500Wp  | 45000Wp            | 45000Wp              | 49500Wp            | 54000Wp            | 60000Wp            | 67500Wp                | 75000Wp            | 60000Wp                                       | 75000Wp               |                        |
| Max. DC power for single MPPT       | 20000Wp  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Number of MPP trackers              | 3  | 3                  | 3                    | 3                  | 3                  | 4                  | 4                      | 4                  | 3   | 4                     |                        |
| Number of DC inputs                 | 6  | 6                  | 6                    | 6                  | 6                  | 8                  | 8                      | 8                  | 6   | 8                     |                        |
| Max. input voltage                  | 1100V  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Start-up voltage                    | 200V   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Rated input voltage                 | 650V   | 650V               | 650V                 | 650V               | 650V               | 650V               | 650V                   | 650V               | 725V  | 725V                  |                        |
| MPPT operating voltage range        | 180V-1000V   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Full power MPPT voltage range       | 480V-850V  | 480V-850V          | 480V-850V            | 510V-850V          | 540V-850V          | 480V-850V          | 510V-850V              | 540V-850V          | 620V-850V                                     | 650V-850V             |                        |
| Max. input MPPT current             | 90A(6*15A or 4*20A)  |                    |                      |                    |                    |                    | 120A(8*15A or 6*20A)   |                    | 90A(6*15A or 4*20A)                           |                       | 120A(8*15A or 6*20A)   |
| Max. DC input short circuit current | 135A(6*22.5A or 4*30A)   |                    |                      |                    |                    |                    | 180A(8*22.5A or 6*30A) |                    | 135A(6*22.5A or 4*30A)                        |                       | 180A(8*22.5A or 6*30A) |
| <b>Output (AC)</b>                  |  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Rated power                         | 25000W   | 30000W             | 30000W               | 33000W             | 36000W             | 40000W             | 45000W                 | 50000W             | 40000W  | 50000W                |                        |
| Max. AC power                       | 28000VA  | 34000VA            | 34000VA              | 37000VA            | 40000VA            | 44000VA            | 49500VA                | 55000VA            | 44000VA                                       | 55000VA               |                        |
| Rated output current                | 37.9A  | 45.5A              | 45.5A                | 50.0A              | 54.5A              | 60.6A              | 68.2A                  | 75.8A              | 48.1A   | 60.2A                 |                        |
| Max. output current                 | 42.4A  | 51.5A              | 51.5A                | 56A                | 60.6A              | 66.7A              | 75A                    | 83.3A              | 53A   | 66.2A                 |                        |
| Nominal grid voltage                | 3/N/PE, 220/380Vac, 230/400Vac, 240/415Vac   |                    |                      |                    |                    |                    |                        |                    | 3/N/PE or 3/PE, 277/480Vac                    |                       |                        |
| Grid voltage range                  | 310Vac-480Vac ( According to local standard )  |                    |                      |                    |                    |                    |                        |                    | 422Vac-528Vac ( According to local standard ) |                       |                        |
| Nominal frequency                   | 50 / 60Hz  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Grid frequency range                | 45Hz-55Hz/54Hz-66Hz ( According to local standard )  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Active power adjustable range       | 0~100%   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| THDi                                | <3%  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Power factor                        | 1 (adjustable +/-0.8)  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| <b>Efficiency</b>                   |  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Max efficiency                      | 98.60%   | 98.60%             | 98.60%               | 98.60%             | 98.60%             | 98.80%             | 98.80%                 | 98.80%             | 98.90%  | 98.90%                |                        |
| European weighted efficiency        | 98.00%   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| <b>Protection</b>                   |  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| DC reverse polarity protection      | Yes  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Anti-islanding protection           | Yes  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Leakage current protection          | Yes  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Ground fault monitoring             | Yes  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| PV-array string fault monitoring    | Yes  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Anti reverse power function         | Yes  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| DC switch                           | Yes  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| AFCI protection                     | Optional   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Anti-PID function                   | Optional   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Input/ output SPD                   | PV:Type II standard, AC:Type II standard   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| <b>Communication</b>                |  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Communication                       | RS485/USB/Bluetooth, Optional:WiFi/GPRS/4G/PLC   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| <b>General Data</b>                 |  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Ambient temperature range           | -30°C~+60°C  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Self-consumption at night           | <3W  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Topology                            | Transformerless  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Degree of protection                | IP65   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Allowable relative humidity range   | 0~100%   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Max. operating altitude             | 4000m  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Noise                               | ≤60dB  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Weight                              | 36kg   |                    |                      |                    |                    |                    |                        |                    | 37kg  |                       |                        |
| Cooling                             | Fan  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Dimension                           | 585*480*220mm  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Display                             | LCD&Bluetooth + APP  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Standard warranty                   | 5 years, Optional: 7 years/ 10 years   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| <b>Standard</b>                     |  |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| EMC                                 | EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Safety standards                    | IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068(1, 2, 14, 30), IEC 60255   |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |
| Grid standards                      | AS/NZS 4777, VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN50549, G98/G99, EN50530, NB/T32004 |                    |                      |                    |                    |                    |                        |                    |   |                       |                        |

The models marked with "\*" should be available only for some designated countries.