



**SOFAR**

## **25K ... 50KTLX-G3**

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

### **THREE-PHASE**

- Up to 4 MPPTs with DC overload capability (up to 150%)
- Type II SPD for both DC and AC side
- Low start-up voltage, wide MPPT voltage range
- I-V curve scanning function

### **THREE TO FOUR MPPTS**

- Max. efficiency up to 98.90%
- Prolonged AC overload capability (110%)
- Compatible with 500 W+ modules
- Intelligent monitoring, remote operation

| Datasheet                                     | SOFAR<br>25KTLX-G3   | SOFAR<br>30KTLX-G3 | SOFAR<br>33KTLX-G3 | SOFAR<br>36KTLX-G3 | SOFAR<br>40KTLX-G3 | SOFAR<br>45KTLX-G3 | SOFAR<br>50KTLX-G3 |
|---|--|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>Input (DC)</b>                             |  |                    |                    |                    |                    |                    |                    |
| Recommended max. PV input power (Wp)          | 37500  | 45000              | 49500              | 54000              | 60000              | 67500              | 75000              |
| Max. DC power for single MPPT (W)             | 25000  |                    |                    |                    |                    |                    |                    |
| Number of MPP trackers                        | 3  |                    |                    |                    | 4                  |                    |                    |
| Number of DC inputs                           | 2 for each MPPT  |                    |                    |                    |                    |                    |                    |
| Max. input voltage (V)                        | 1100   |                    |                    |                    |                    |                    |                    |
| Start-up voltage (V)                          | 200  |                    |                    |                    |                    |                    |                    |
| Rated input voltage (V)                       | 620  |                    |                    |                    |                    |                    |                    |
| MPPT operating voltage range (V)              | 180 – 1000   |                    |                    |                    |                    |                    |                    |
| Full power MPPT voltage range (V)             | 480 – 850  | 510 – 850          | 540 – 850          | 480 – 850          | 510 – 850          | 540 – 850          | 540 – 850          |
| Max. input MPPT current (A)                   | 3*40   |                    |                    |                    | 4*40               |                    |                    |
| Max. input short circuit current per MPPT (A) | 3*50   |                    |                    |                    | 4*50               |                    |                    |
| <b>Output (AC)</b>                            |  |                    |                    |                    |                    |                    |                    |
| Rated power (W)                               | 25000  | 30000              | 33000              | 36000              | 40000              | 45000              | 50000              |
| Max. AC power (VA)                            | 28000  | 34000              | 37000              | 40000              | 44000              | 50000              | 55000              |
| Max. output current (A)                       | 42.4   | 51.5               | 56.0               | 60.6               | 66.7               | 75.8               | 83.3               |
| Rated grid voltage                            | 3 / N / PE, 230 / 400  |                    |                    |                    |                    |                    |                    |
| Grid voltage range                            | 310 – 480 Vac (according to local standard)  |                    |                    |                    |                    |                    |                    |
| Rated frequency                               | 50 Hz / 60 Hz  |                    |                    |                    |                    |                    |                    |
| Grid frequency range                          | 45 – 55 Hz / 55 – 65 Hz (according to local standard)  |                    |                    |                    |                    |                    |                    |
| Active power adjustable range                 | 0 – 100%   |                    |                    |                    |                    |                    |                    |
| THDi  | < 3%   |                    |                    |                    |                    |                    |                    |
| Power factor                                  | 1 default (adjustable +/-0.8)  |                    |                    |                    |                    |                    |                    |
| <b>Performance</b>                            |  |                    |                    |                    |                    |                    |                    |
| Max. efficiency                               | 98.60%   |                    |                    |                    | 98.80%             |                    |                    |
| European weighted efficiency                  | 98.20%   |                    |                    |                    |                    |                    |                    |
| <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  |                    |                    |                    |                    |                    |                    |
| Feed-in limitation function                   | Yes  |                    |                    |                    |                    |                    |                    |
| DC switch                                     | Optional   |                    |                    |                    |                    |                    |                    |
| Input / output SPD                            | PV: type II standard, AC: type II standard   |                    |                    |                    |                    |                    |                    |
| <b>Communication</b>                          |  |                    |                    |                    |                    |                    |                    |
| Standard communication mode                   | RS485 / WiFi / Bluetooth, optional: Ethernet   |                    |                    |                    |                    |                    |                    |
| <b>General Data</b>                           |  |                    |                    |                    |                    |                    |                    |
| Ambient temperature range                     | -30°C – 60°C   |                    |                    |                    |                    |                    |                    |
| Self-consumption at night (W)                 | <3   |                    |                    |                    |                    |                    |                    |
| Topology                                      | Transformerless  |                    |                    |                    |                    |                    |                    |
| Degree of protection                          | IP65   |                    |                    |                    |                    |                    |                    |
| Allowable relative humidity range             | 0 – 100%   |                    |                    |                    |                    |                    |                    |
| Max. operating altitude                       | 4000 m   |                    |                    |                    |                    |                    |                    |
| Noise   | < 60 dB  |                    |                    |                    |                    |                    |                    |
| Weight (kg)                                   | 36   |                    |                    |                    | 37                 |                    |                    |
| Cooling                                       | Fan  |                    |                    |                    |                    |                    |                    |
| Dimension (mm)                                | 585*480*220  |                    |                    |                    |                    |                    |                    |
| Display                                       | LCD, App via Bluetooth   |                    |                    |                    |                    |                    |                    |
| Warranty                                      | 10 years, optional: up to 20 years   |                    |                    |                    |                    |                    |                    |
| <b>Standard</b>                               |  |                    |                    |                    |                    |                    |                    |
| EMC   | EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4   |                    |                    |                    |                    |                    |                    |
| Safety standards                              | IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068(1,2,14,30), IEC 60255                          |                    |                    |                    |                    |                    |                    |
| Grid standards                                | VDE V 0124-100, V 0126-1-1, VDE-AR-N 4105, CEI 0-21/CEI 0-16, UNE 206 007-1, EN 50549, G98/G99, EN 50530 |                    |                    |                    |                    |                    |                    |

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