



# SOFAR 3K~6KTLM-G3

3000/3600/4000/4600/5000/6000



## Single-Phase Dual-MPPT

- 0** Built-in zero export function
- AFCI** Optional AFCI function
- Compact design, light in weight**
- Natural cooling, no fans, low noise**
- 98.4%** Max. efficiency up to 98.4%
- 2 MPPT** Two MPP trackers with 1.5\*DC overload
- Smart monitoring, remote firmware upgrade**

| Datasheet                                 | SOFAR<br>3KTLM-G3  | SOFAR<br>3.6KTLM-G3 | SOFAR<br>4KTLM-G3 | SOFAR<br>4.6KTLM-G3 | SOFAR<br>5KTLM-G3 | SOFAR<br>5KTLM-G3-A | SOFAR<br>6KTLM-G3 |
|---|--|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|
| <b>Input (DC)</b>                         |  |                     |                   |                     |                   |                     |                   |
| Recommended Max. PV input power           | 4500Wp   | 5400Wp              | 6000Wp            | 7000Wp              | 7500Wp            | 7500Wp              | 9000Wp            |
| Max DC power for single MPPT              | 3500W  | 3500W               | 3500W             | 3500W               | 3750W             | 3750W               | 4500W             |
| Number of MPP trackers                    | 2  |                     |                   |                     |                   |                     |                   |
| Number of DC inputs                       | 1 for each MPPT  |                     |                   |                     |                   |                     |                   |
| Max. Input voltage                        | 600V   |                     |                   |                     |                   |                     |                   |
| Start-up voltage                          | 90V  |                     |                   |                     |                   |                     |                   |
| Rated input voltage                       | 380V   |                     |                   |                     |                   |                     |                   |
| MPPT operating voltage range              | 80V-550V   |                     |                   |                     |                   |                     |                   |
| Full power MPPT voltage range             | 200V-500V  | 200V-500V           | 200V-500V         | 200V-500V           | 210V-500V         | 210V-500V           | 260V-500V         |
| Max. Input MPPT current                   | 15A/15A  |                     |                   |                     |                   |                     |                   |
| Max. input short circuit current per MPPT | 22.5A/22.5A  |                     |                   |                     |                   |                     |                   |
| <b>Output (AC)</b>                        |  |                     |                   |                     |                   |                     |                   |
| Rated power                               | 3000W  | 3680W               | 4000W             | 4600W               | 5000W             | 5000W               | 6000W             |
| Max. AC power                             | 3300VA   | 3680VA              | 4400VA            | 4600VA              | 5500VA            | 5000VA              | 6000VA            |
| Nominal output current                    | 13.6A  | 16A                 | 18.2A             | 21A                 | 22.7A             | 21.7A               | 27.3A             |
| Max. Output current                       | 15A  | 16A                 | 20A               | 23A                 | 25A               | 21.7A               | 29A               |
| Nominal grid voltage                      | L/N/PE, 220Vac, 230Vac, 240Vac   |                     |                   |                     |                   |                     |                   |
| Grid voltage range                        | 180Vac-276Vac (According to local standard)  |                     |                   |                     |                   |                     |                   |
| Nominal frequency                         | 50Hz/60Hz  |                     |                   |                     |                   |                     |                   |
| Grid frequency range                      | 45Hz-55Hz/54Hz-66Hz (According to local standard)  |                     |                   |                     |                   |                     |                   |
| Active power adjustable range             | 0 – 100%   |                     |                   |                     |                   |                     |                   |
| THDI                                      | < 3%   |                     |                   |                     |                   |                     |                   |
| Power factor                              | 1 default (adjustable + / - 0.8)   |                     |                   |                     |                   |                     |                   |
| <b>Performance</b>                        |  |                     |                   |                     |                   |                     |                   |
| Max efficiency                            | 98.2%  | 98.2%               | 98.2%             | 98.4%               | 98.4%             | 98.4%               | 98.4%             |
| European efficiency                       | 97.3%  | 97.3%               | 97.3%             | 97.5%               | 97.5%             | 97.5%               | 97.5%             |
| <b>Protection</b>                         |  |                     |                   |                     |                   |                     |                   |
| DC reverse polarity protection            | Yes  |                     |                   |                     |                   |                     |                   |
| DC switch                                 | Optional   |                     |                   |                     |                   |                     |                   |
| AFCI protection                           | Optional   |                     |                   |                     |                   |                     |                   |
| Protection class/overvoltage category     | I/III  |                     |                   |                     |                   |                     |                   |
| Safety protection                         | Anti islanding, RCMU, Ground fault monitoring  |                     |                   |                     |                   |                     |                   |
| SPD                                       | MOV, Type III standard   |                     |                   |                     |                   |                     |                   |
| <b>Communication</b>                      |  |                     |                   |                     |                   |                     |                   |
| Standard communication mode               | RS485/USB, Optional: WiFi/GPRS/4G  |                     |                   |                     |                   |                     |                   |
| <b>General Data</b>                       |  |                     |                   |                     |                   |                     |                   |
| Ambient temperature range                 | -30°C – +60°C  |                     |                   |                     |                   |                     |                   |
| Self-consumption at night                 | < 1W   |                     |                   |                     |                   |                     |                   |
| Topology                                  | Transformerless  |                     |                   |                     |                   |                     |                   |
| Degree of protection                      | IP65   |                     |                   |                     |                   |                     |                   |
| Allowable relative humidity range         | 0 – 100%   |                     |                   |                     |                   |                     |                   |
| Max. Operating altitude                   | 4000m  |                     |                   |                     |                   |                     |                   |
| Noise                                     | < 25dB   |                     |                   |                     |                   |                     |                   |
| Weight                                    | 9.2kg  | 9.2kg               | 9.2kg             | 10kg                | 10kg              | 10kg                | 10kg              |
| Cooling                                   | Natural  |                     |                   |                     |                   |                     |                   |
| Dimension                                 | 349*344*164mm  |                     |                   |                     |                   |                     |                   |
| Display                                   | LCD&Bluetooth+APP  |                     |                   |                     |                   |                     |                   |
| Standard warranty                         | 5 years, Optional: 7&10 years  |                     |                   |                     |                   |                     |                   |
| <b>Standard</b>                           |  |                     |                   |                     |                   |                     |                   |
| EMC                                       | EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12                 |                     |                   |                     |                   |                     |                   |
| Safety standards                          | IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068(1,2,14,30)                                     |                     |                   |                     |                   |                     |                   |
| Grid standards                            | VDE-AR-N 4105, VDE V 0126-1-1, V 0124-100, AS/NZS 4777, CEI 0-21, G98/G99, C10/11, EN 50549, RD 1699 |                     |                   |                     |                   |                     |                   |