



# SOFAR 3K~6KTLM-G3

3000/3600/4000/4600/5000/6000



## Single-Phase      Dual-MPPT

- |                                                                                     |                                           |                                                                                     |                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------|
| <b>0</b>                                                                            | Built-in zero export function             | <b>AFCI</b>                                                                         | Optional AFCI function                |
|  | Compact design, light in weight           |  | Natural cooling, no fans, low noise   |
| <b>98.4%</b>                                                                        | Max. efficiency up to 98.4%               | <b>2 MPPT</b>                                                                       | 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 |
|-------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|
| Input (DC)                                |                                                                                                      |                     |                   |                     |                   |                     |                   |
| 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                                                                                          |                     |                   |                     |                   |                     |                   |
| Output (AC)                               |                                                                                                      |                     |                   |                     |                   |                     |                   |
| 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)                                                                        |                     |                   |                     |                   |                     |                   |
| Performance                               |                                                                                                      |                     |                   |                     |                   |                     |                   |
| 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%             |
| Protection                                |                                                                                                      |                     |                   |                     |                   |                     |                   |
| 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                                                                               |                     |                   |                     |                   |                     |                   |
| Communication                             |                                                                                                      |                     |                   |                     |                   |                     |                   |
| Standard communication mode               | RS485/USB, Optional: WiFi/GPRS/4G                                                                    |                     |                   |                     |                   |                     |                   |
| General Data                              |                                                                                                      |                     |                   |                     |                   |                     |                   |
| 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                         | 10 years                                                                                             |                     |                   |                     |                   |                     |                   |
| Standard                                  |                                                                                                      |                     |                   |                     |                   |                     |                   |
| 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 |                     |                   |                     |                   |                     |                   |