

# Three Phase String Inverter(LV)

## SUN-20/25/30K-G02-LV    SUN-23/25/30K-G03-LV



- LV

127/220Vac, 133/230Vac and 60/50Hz, Three phase system
- Max. 4 MPP trackers, Max. efficiency up to 98.7%
- F

Zero export application, VSG application
- String intelligent monitoring (optional)
- Wide output voltage range
- PID

Anti-PID function (Optional)

### Technical Data

| Model                                     | SUN-20K-G02-LV   SUN-25K-G02-LV   SUN-30K-G02-LV   SUN-23K-G03-LV   SUN-25K-G03-LV   SUN-30K-G03-LV |          |             |                   |      |             |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------|----------|-------------|-------------------|------|-------------|
| Input Side                                |                                                                                                     |          |             |                   |      |             |
| Max. DC Input Power (kW)                  | 26                                                                                                  | 32.5     | 39          | 29.9              | 32.5 | 39          |
| Max. DC Input Voltage (V)                 | 800                                                                                                 |          |             |                   |      |             |
| Start-up DC Input Voltage (V)             | 250                                                                                                 |          |             |                   |      |             |
| MPPT Operating Range (V)                  | 200-700                                                                                             |          |             |                   |      |             |
| Max. DC Input Current (A)                 | 40+40                                                                                               | 40+40+40 | 40+40+40+40 | 40+40+40          |      | 40+40+40+40 |
| Max. Short Circuit Current (A)            | 60+60                                                                                               | 60+60+60 | 60+60+60+60 | 60+60+60          |      | 60+60+60+60 |
| No.of MPP Trackers                        | 2                                                                                                   | 3        | 4           | 3                 |      | 4           |
| No.of Strings per MPP Tracker             | 3+3                                                                                                 | 3+3+3    | 3+3+3+3     | 3+3+3             |      | 3+3+3+3     |
| Output Side                               |                                                                                                     |          |             |                   |      |             |
| Rated Output Power (kW)                   | 20                                                                                                  | 25       | 30          | 23                | 25   | 30          |
| Max. Active Power (kW)                    | 22                                                                                                  | 27.5     | 33          | 23                | 25   | 30          |
| Nominal Output Voltage / Range (V)        | 3L/N/PE 127V/220V                                                                                   |          |             | 3L/N/PE 133V/230V |      |             |
| Rated Grid Frequency (Hz)                 | 60Hz/55Hz-65Hz                                                                                      |          |             | 50Hz/45Hz-55Hz    |      |             |
| Operating Phase                           | Three Phase                                                                                         |          |             |                   |      |             |
| Rated AC Grid Output Current (A)          | 52.5                                                                                                | 65.6     | 78.7        | 57.7              | 62.7 | 75.2        |
| Max. AC Output Current (A)                | 57.8                                                                                                | 72.2     | 86.6        | 57.7              | 62.7 | 75.2        |
| Output Power Factor                       | 0.8 leading to 0.8 lagging                                                                          |          |             |                   |      |             |
| Total Harmonics Current Distortion (THDi) | <3%                                                                                                 |          |             |                   |      |             |
| DC Injection Current (mA)                 | <0.5%                                                                                               |          |             |                   |      |             |
| Efficiency                                |                                                                                                     |          |             |                   |      |             |
| Max. Efficiency                           | 98.7%                                                                                               |          |             |                   |      |             |
| Euro Efficiency                           | 98%                                                                                                 |          |             |                   |      |             |
| MPPT Efficiency                           | >99%                                                                                                |          |             |                   |      |             |
| Protection                                |                                                                                                     |          |             |                   |      |             |
| DC Reverse-Polarity Protection            | Yes                                                                                                 |          |             |                   |      |             |
| AC Short Circuit Protection               | Yes                                                                                                 |          |             |                   |      |             |
| AC Output Overcurrent Protection          | Yes                                                                                                 |          |             |                   |      |             |
| Output Overvoltage Protection             | Yes                                                                                                 |          |             |                   |      |             |
| Insulation Resistance Protection          | Yes                                                                                                 |          |             |                   |      |             |
| Ground Fault Monitoring                   | Yes                                                                                                 |          |             |                   |      |             |
| Anti-islanding Protection                 | Yes                                                                                                 |          |             |                   |      |             |
| Temperature Protection                    | Yes                                                                                                 |          |             |                   |      |             |
| Integrated DC Switch                      | Yes                                                                                                 |          |             |                   |      |             |
| Remote Software Upload                    | Yes                                                                                                 |          |             |                   |      |             |
| Remote Change of Operating Parameters     | Yes                                                                                                 |          |             |                   |      |             |
| Surge Protection                          | DC Type II / AC Type II                                                                             |          |             |                   |      |             |
| General Data                              |                                                                                                     |          |             |                   |      |             |
| Cabinet Size (WxHxD mm)                   | 647.5×537×303.5 (Excluding Connectors and Brackets)                                                 |          |             |                   |      |             |
| Weight (kg)                               | 44.5                                                                                                |          |             |                   |      |             |
| Topology                                  | Transformerless                                                                                     |          |             |                   |      |             |
| Internal Consumption                      | <1W (Night)                                                                                         |          |             |                   |      |             |
| Running Temperature                       | -25-65°C, >45°C Derating                                                                            |          |             |                   |      |             |
| Ingress Protection                        | IP65                                                                                                |          |             |                   |      |             |
| Noise Emission (Typical)                  | ≤50 dB                                                                                              |          |             |                   |      |             |
| Cooling Concept                           | Smart Cooling                                                                                       |          |             |                   |      |             |
| Permissible Altitude (m)                  | 2000                                                                                                |          |             |                   |      |             |
| Warranty                                  | 5 Years                                                                                             |          |             |                   |      |             |
| Grid Connection Standard                  | NBR 16149, NBR 16150, EN 50549, RD 140                                                              |          |             |                   |      |             |
| Operating Surroundings Humidity           | 0-100%                                                                                              |          |             |                   |      |             |
| Safety EMC / Standard                     | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                              |          |             |                   |      |             |
| Features                                  |                                                                                                     |          |             |                   |      |             |
| Display                                   | LCD1602                                                                                             |          |             |                   |      |             |
| Interface                                 | RS485/RS232/Wifi/LAN                                                                                |          |             |                   |      |             |