

# Three Phase String Inverter(LV)

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



120V/208V, 127V/220V, 133V/230V and 50/60Hz, Three phase system



Max. 4 MPP trackers, Max. efficiency up to 98.7%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Anti-PID function (Optional)

**Deye**

Stock Code: 605117.SH

| 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             |
| Rated Output Voltage/Range (V)            | 3L/N/PE 127V/220V<br>0.85Un-1.1Un (this may vary with grid standards)                               |          |             | 3L/N/PE 120V/208V, 127V/220V, 133V/230V<br>0.85Un-1.1Un (this may vary with grid standards) |                |                |
| Rated Grid Frequency (Hz)                 | 60                                                                                                  |          |             | 50/60                                                                                       |                |                |
| Operating Phase                           | Three Phase                                                                                         |          |             |                                                                                             |                |                |
| Rated AC Grid Output Current (A)          | 52.5                                                                                                | 65.6     | 78.7        | 63.9/60.4/57.7                                                                              | 69.5/65.7/62.7 | 83.4/78.8/75.2 |
| Max. AC Output Current (A)                | 57.8                                                                                                | 72.2     | 86.6        | 63.9/60.4/57.7                                                                              | 69.5/65.7/62.7 | 83.4/78.8/75.2 |
| 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                                                                                |          |             |                                                                                             |                |                |