

# Three Phase String Inverter

SUN- 70 / 75 / 80 / 90 / 100 / 110 K-G03



Max. 6 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)



Type II DC/AC SPD

**Deye**

Stock Code: 605117.SH

| Model                                    | SUN-70K-G03   | SUN-75K-G03 | SUN-80K-G03 | SUN-90K-G03       | SUN-100K-G03 | SUN-110K-G03   |
|--|---|-------------|-------------|-------------------|--------------|----------------|
| <b>Input Side</b>                        |   |             |             |                   |              |                |
| Max. DC Input Power (kW)                 | 91  | 97.5        | 104         | 135               | 150          | 150            |
| Max. DC Input Voltage (V)                | 1000  |             |             |                   |              |                |
| Start-up DC Input Voltage (V)            | 250   |             |             |                   |              |                |
| MPPT Operating Range (V)                 | 200~850   |             |             |                   |              |                |
| Max. DC Input Current (A)                | 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 |              |                |
| No.of MPP Trackers                       | 4   |             |             | 6                 |              |                |
| No.of Strings per MPP Tracker            | 4   |             |             |                   |              |                |
| <b>Output Side</b>                       |   |             |             |                   |              |                |
| Rated Output Power (kW)                  | 70  | 75          | 80          | 90                | 100          | 110            |
| Max. Active Power (kW)                   | 77  | 82.5        | 88          | 99                | 110          | 121            |
| Nominal Output Voltage / Range (V)       | 3L/N/PE 220/380V, 230/400V  |             |             |                   |              |                |
| Rated Grid Frequency (Hz)                | 50 / 60 (Optional)  |             |             |                   |              |                |
| Operating Phase                          | Three phase   |             |             |                   |              |                |
| Rated AC Grid Output Current (A)         | 106.1/101.5   | 113.6/108.7 | 121.2/115.9 | 136.4/130.4       | 151.5/144.9  | 166.7/159.4    |
| Max. AC Output Current (A)               | 116.7/111.6   | 125/119.6   | 133.3/127.5 | 150/143.5         | 166.7/159.4  | 183.3/175.4    |
| Output Power Factor                      | 0.8 leading to 0.8 lagging  |             |             |                   |              |                |
| Grid Current THD                         | <3%   |             |             |                   |              |                |
| DC Injection Current (mA)                | <0.5%   |             |             |                   |              |                |
| Grid Frequency Range                     | 47~52 or 57~62 (Optional)   |             |             |                   |              |                |
| <b>Efficiency</b>                        |   |             |             |                   |              |                |
| Max. Efficiency                          | 98.8%   |             |             |                   |              |                |
| Euro Efficiency                          | 98.3%   |             |             |                   |              |                |
| MPPT Efficiency                          | >99%  |             |             |                   |              |                |
| <b>Protection</b>                        |   |             |             |                   |              |                |
| 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   |             |             |                   |              |                |
| <b>General Data</b>                      |   |             |             |                   |              |                |
| Size (mm)                                | 838W×568H×324D  |             |             |                   |              | 838W×568H×346D |
| Weight (kg)                              | 81  |             |             |                   |              |                |
| Topology                                 | Transformerless   |             |             |                   |              |                |
| Internal Consumption                     | <1W (Night)   |             |             |                   |              |                |
| Running Temperature                      | -25~65 , >45 derating   |             |             |                   |              |                |
| Ingress Protection                       | IP65  |             |             |                   |              |                |
| Noise Emission (Typical)                 | <55 dB  |             |             |                   |              |                |
| Cooling Concept                          | Smart cooling   |             |             |                   |              |                |
| Max. Operating Altitude Without Derating | 2000m   |             |             |                   |              |                |
| Warranty                                 | 5 years   |             |             |                   |              |                |
| Grid Connection Standard                 | CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98, VDE 0126-1-1, RD 1699, C10-11 |             |             |                   |              |                |
| Operating Surroundings Humidity          | 0-100%  |             |             |                   |              |                |
| Safety EMC / Standard                    | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2  |             |             |                   |              |                |
| <b>Features</b>                          |   |             |             |                   |              |                |
| DC Connection                            | MC-4 mateable   |             |             |                   |              |                |
| AC Connection                            | IP65 rated plug   |             |             |                   |              |                |
| Display                                  | LCD 240 × 160   |             |             |                   |              |                |
| Interface                                | RS485/RS232/Wifi/LAN  |             |             |                   |              |                |