

# 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 |              |              |
| Number of MPPT / Strings per MPPT        | 4/4   |             |             | 6/4               |              |              |
| <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 380V/323V-418V, 400V/340V-440V  |             |             |                   |              |              |
| Rated Grid Frequency (Hz)                | 50 / 60 (Optional)  |             |             |                   |              |              |
| Operating Phase                          | Three phase   |             |             |                   |              |              |
| Rated AC Grid Output Current (A)         | 101.5   | 108.7       | 115.9       | 130.4             | 144.9        | 159.4        |
| Max. AC Output Current (A)               | 111.6   | 119.6       | 127.5       | 143.5             | 159.4        | 175.4        |
| Output Power Factor                      | >0.99   |             |             |                   |              |              |
| Grid Current THD                         | <3%   |             |             |                   |              |              |
| DC Injection Current (mA)                | <0.5%   |             |             |                   |              |              |
| Grid Frequency Range                     | 47~52 or 57~62 (Optional)   |             |             |                   |              |              |
| <b>Efficiency</b>                        |   |             |             |                   |              |              |
| Max. Efficiency                          | 98.7%   |             |             |                   |              |              |
| 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×323D  |             |             |                   |              |              |
| Weight (kg)                              | 73.7  |             |             |                   |              |              |
| Topology                                 | Transformerless   |             |             |                   |              |              |
| Internal Consumption                     | <1W (Night)   |             |             |                   |              |              |
| Running Temperature                      | -25~65°C, >45°C derating  |             |             |                   |              |              |
| Ingress Protection                       | IP65  |             |             |                   |              |              |
| Noise Emission (Typical)                 | <55 dB  |             |             |                   |              |              |
| Cooling Concept                          | Smart cooling   |             |             |                   |              |              |
| Max. Operating Altitude Without Derating | 2000m   |             |             |                   |              |              |
| Designed Lifetime                        | >20 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  |             |             |                   |              |              |