

# Three Phase String Inverter

SUN-60/70/75/80K-G



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)



Type II DC/AC SPD

**Deye**

Stock Code: 605117.SH

| Model                                                     | SUN-60K-G                                                                                                     |  | SUN-70K-G   |  | SUN-75K-G   |  | SUN-80K-G   |  |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--|-------------|--|-------------|--|-------------|--|
| PV String Input Data                                      |                                                                                                               |  |             |  |             |  |             |  |
| Max. PV Input Power (kW)                                  | 78                                                                                                            |  | 91          |  | 97.5        |  | 104         |  |
| Max. PV Input Voltage (V)                                 | 1000                                                                                                          |  |             |  |             |  |             |  |
| Start-up Voltage (V)                                      | 250                                                                                                           |  |             |  |             |  |             |  |
| MPPT Voltage Range (V)                                    | 200-850                                                                                                       |  |             |  |             |  |             |  |
| Rated PV Input Voltage (V)                                | 600                                                                                                           |  |             |  |             |  |             |  |
| Max. Operating PV Input Current (A)                       | 40+40+40+40                                                                                                   |  |             |  |             |  |             |  |
| Max. Input Short Circuit Current (A)                      | 60+60+60+60                                                                                                   |  |             |  |             |  |             |  |
| No. of MPPT Trackers/<br>No. of Strings per MPPT Trackers | 4/3+3+3+3                                                                                                     |  | 4/4+4+4+4   |  |             |  |             |  |
| AC Output Side                                            |                                                                                                               |  |             |  |             |  |             |  |
| Rated AC Output Active Power (kW)                         | 60                                                                                                            |  | 70          |  | 75          |  | 80          |  |
| Max. AC Output Apparent Power (kVA)                       | 66                                                                                                            |  | 77          |  | 82.5        |  | 88          |  |
| Rated AC Output Current (A)                               | 90.9/87                                                                                                       |  | 106.1/101.5 |  | 113.6/108.7 |  | 121.2/115.9 |  |
| Max. AC Output Current (A)                                | 100/95.7                                                                                                      |  | 116.7/111.6 |  | 125/119.6   |  | 133.3/127.5 |  |
| Rated Output Voltage/Range (V)                            | 220/380V, 230/400V 0.85Un-1.1Un                                                                               |  |             |  |             |  |             |  |
| Grid Connection Form                                      | 3L/N/PE                                                                                                       |  |             |  |             |  |             |  |
| Rated Output Grid Frequency/Range(Hz)                     | 50/45-55, 60/55-65                                                                                            |  |             |  |             |  |             |  |
| Power Factor Adjustment Range                             | 0.8 leading to 0.8 lagging                                                                                    |  |             |  |             |  |             |  |
| Total Current Harmonic Distortion THDi                    | <3%                                                                                                           |  |             |  |             |  |             |  |
| DC Component of Grid                                      | <0.5%In                                                                                                       |  |             |  |             |  |             |  |
| Efficiency                                                |                                                                                                               |  |             |  |             |  |             |  |
| Max. Efficiency                                           | 98.6%                                                                                                         |  | 98.7%       |  |             |  |             |  |
| Euro Efficiency                                           | 98.0%                                                                                                         |  | 98.1%       |  |             |  |             |  |
| MPPT Efficiency                                           | >99%                                                                                                          |  |             |  |             |  |             |  |
| Equipment Protection                                      |                                                                                                               |  |             |  |             |  |             |  |
| DC Polarity Reverse Connection Protection                 | Yes                                                                                                           |  |             |  |             |  |             |  |
| AC Output Overcurrent Protection                          | Yes                                                                                                           |  |             |  |             |  |             |  |
| AC Output Overvoltage Protection                          | Yes                                                                                                           |  |             |  |             |  |             |  |
| AC Output Short Circuit Protection                        | Yes                                                                                                           |  |             |  |             |  |             |  |
| Thermal Protection                                        | Yes                                                                                                           |  |             |  |             |  |             |  |
| DC Terminal Insulation Impedance Monitoring               | Yes                                                                                                           |  |             |  |             |  |             |  |
| DC Component Monitoring                                   | Yes                                                                                                           |  |             |  |             |  |             |  |
| Ground Fault Current Monitoring                           | Yes                                                                                                           |  |             |  |             |  |             |  |
| Power Network Monitoring                                  | Yes                                                                                                           |  |             |  |             |  |             |  |
| Island Protection Monitoring                              | Yes                                                                                                           |  |             |  |             |  |             |  |
| Earth Fault Detection                                     | Yes                                                                                                           |  |             |  |             |  |             |  |
| Overvoltage Load Drop Protection                          | Yes                                                                                                           |  |             |  |             |  |             |  |
| Residual Current (RCD) Detection                          | Yes                                                                                                           |  |             |  |             |  |             |  |
| Surge Protection Level                                    | TYPE II(DC), TYPE II(AC)                                                                                      |  |             |  |             |  |             |  |
| Interface                                                 |                                                                                                               |  |             |  |             |  |             |  |
| Communication Interface                                   | RS485/RS232 /WiFi/LAN                                                                                         |  |             |  |             |  |             |  |
| General Data                                              |                                                                                                               |  |             |  |             |  |             |  |
| Operating Temperature Range (°C)                          | -25 to +60°C, >45°C Derating                                                                                  |  |             |  |             |  |             |  |
| Permissible Ambient Humidity                              | 0-100%                                                                                                        |  |             |  |             |  |             |  |
| Permissible Altitude (m)                                  | 4000m                                                                                                         |  |             |  |             |  |             |  |
| Noise (dB)                                                | ≤50 dB(A)                                                                                                     |  | ≤55 dB(A)   |  |             |  |             |  |
| Ingress Protection(IP) Rating                             | IP 65                                                                                                         |  |             |  |             |  |             |  |
| Inverter Topology                                         | Non-Isolated                                                                                                  |  |             |  |             |  |             |  |
| Over Voltage Category                                     | OVC II(DC), OVC III(AC)                                                                                       |  |             |  |             |  |             |  |
| Cabinet Size (WxHxD mm)                                   | 700×575×297 (Excluding Connectors and Brackets)                                                               |  |             |  |             |  |             |  |
| Weight (kg)                                               | 60                                                                                                            |  |             |  |             |  |             |  |
| Warranty                                                  | 5 Years                                                                                                       |  |             |  |             |  |             |  |
| Type of Cooling                                           | Intelligent Air Cooling                                                                                       |  |             |  |             |  |             |  |
| Grid Regulation                                           | IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 |  |             |  |             |  |             |  |
| Safety EMC/Standard                                       | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2                                                        |  |             |  |             |  |             |  |