

# Three Phase String Inverter

SUN-18/20/22/23/25K-G05



2 MPP trackers, Max. efficiency up to 98.6%



Zero export application, VSG application



String intelligent monitoring (optional)



Wide output voltage range



Anti-PID function (Optional)

**Deye**

Stock Code: 605117.SH

| Model  | SUN-18K-G05   | SUN-20K-G05 | SUN-22K-G05 | SUN-23K-G05 | SUN-25K-G05 |
|--|---|-------------|-------------|-------------|-------------|
| <b>PV String Input Data</b>                            |   |             |             |             |             |
| Max. PV Input Power (kW)                               | 23.4  | 26          | 28.6        | 29.9        | 32.5        |
| Max. PV Input Voltage (V)                              | 1100  |             |             |             |             |
| Start-up Voltage (V)                                   | 250   |             |             |             |             |
| MPPT Voltage Range (V)                                 | 200-1000  |             |             |             |             |
| Rated PV Input Voltage (V)                             | 600   |             |             |             |             |
| Max. Operating PV Input Current (A)                    | 26+26   |             |             |             |             |
| Max. Input Short Circuit Current (A)                   | 39+39   |             |             |             |             |
| No. of MPP Trackers/<br>No. of Strings per MPP Tracker | 2/2+2   |             |             |             |             |
| <b>AC Output Side</b>                                  |   |             |             |             |             |
| Rated AC Output Active Power (kW)                      | 18  | 20          | 22          | 23          | 25          |
| Max. AC Output Apparent Power (kVA)                    | 19.8  | 22          | 24.2        | 25.3        | 27.5        |
| Rated AC Output Current (A)                            | 27.3/26.1   | 30.3/29     | 33.4/31.9   | 34.9/33.4   | 37.9/36.2   |
| Max. AC Output Current (A)                             | 30/28.7   | 33.3/31.9   | 36.7/35.1   | 38.4/36.7   | 41.7/39.8   |
| 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 Injection Current                                   | <0.5In  |             |             |             |             |
| <b>Efficiency</b>                                      |   |             |             |             |             |
| Max. Efficiency  | 98.5%   |             |             |             |             |
| Euro Efficiency  | 98%   |             |             |             |             |
| MPPT Efficiency  | >99%  |             |             |             |             |
| <b>Equipment Protection</b>                            |   |             |             |             |             |
| 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)  |             |             |             |             |
| <b>Interface</b>                                       |   |             |             |             |             |
| Communication Interface                                | RS485/RS232   |             |             |             |             |
| Monitor Mode   | GPRS/WIFI/Bluetooth/4G/LAN(optional)  |             |             |             |             |
| <b>General Data</b>                                    |   |             |             |             |             |
| Operating Temperature Range (°C)                       | -25 to +60°C, >45°C Derating  |             |             |             |             |
| Permissible Ambient Humidity                           | 0-100%  |             |             |             |             |
| Permissible Altitude (m)                               | 4000m   |             |             |             |             |
| Noise (dB)   | ≤50   |             |             |             |             |
| Ingress Protection(IP) Rating                          | IP 65   |             |             |             |             |
| Inverter Topology                                      | Non-Isolated  |             |             |             |             |
| Over Voltage Category                                  | OVC II(DC), OVC III(AC)   |             |             |             |             |
| Cabinet Size (WxHxD mm)                                | 362×527×220 (Excluding Connectors and Brackets)   |             |             |             |             |
| Weight (kg)  | 20  |             |             |             |             |
| 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  |             |             |             |             |