

Three Phase String Inverter

SUN-40/45/50K-G04



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-40K-G04 | SUN-45K-G04 | SUN-50K-G04 |
|--|---|-------------|-------------|
| PV String Input Data | | | |
| Max. PV Input Power (kW) | 52 | 58.5 | 65 |
| 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) | 40+40+40 | 40+40+40+40 | |
| Max. Input Short Circuit Current (A) | 60+60+60 | 60+60+60+60 | |
| No. of MPP Trackers/ No. of Strings per MPP Tracker | 3/3+3+3 | 4/3+3+3+3 | |
| AC Output Side | | | |
| Rated AC Output Active Power (kW) | 40 | 45 | 50 |
| Max. AC Output Apparent Power (kVA) | 44 | 49.5 | 55 |
| Rated AC Output Current (A) | 60.6/58 | 68.2/65.2 | 75.8/72.5 |
| Max. AC Output Current (A) | 66.7/63.8 | 75/71.7 | 83.3/79.7 |
| 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 | <0.5%In | | |
| Efficiency | | | |
| Max. Efficiency | 98.7% | | |
| Euro Efficiency | 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 | | |
| Ingress Protection(IP) Rating | IP 65 | | |
| Inverter Topology | Non-Isolated | | |
| Over Voltage Category | OVC II(DC), OVC III(AC) | | |
| Cabinet Size (WxHxD mm) | 434×570×243 (Excluding Connectors and Brackets) | | |
| Weight (kg) | 37.1 | | |
| 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 | | |