# Three Phase String Inverter

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





- Max. 6 MPP trackers, Max. efficiency up to 98.8%
- 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

# Technical Data



| Model | SUN-70K-G03 | SUN-75K-G03 | SUN-80K-G03 | SUN-90K-G03 | SUN-100K-G03 | SUN-110K-G03 |
|---|---|---|---|---|---|---|
| **PV String Input Data** | | | | | | |
| Max. PV Input Power (kW) | 91 | 97.5 | 104 | 135 | 150 | 150 |
| 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 | | | 40+40+40+40+40+40 | | |
| Max. Input Short Circuit Current (A) | 60+60+60+60 | | | 60+60+60+60+60+60 | | |
| No. of MPP Trackers/ No. of Strings MPP Tracker | 4/4+4+4+4 | | | 6/4+4+4+4+4+4 | | |
| **AC Output Side** | | | | | | |
| Rated AC Output Active Power (kW) | 70 | 75 | 80 | 90 | 100 | 110 |
| Max. AC Output Apparent Power (kVA) | 77 | 82.5 | 88 | 99 | 110 | 121 |
| Rated AC 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 |
| 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% | | | 98.8% | | |
| Euro Efficiency | 98.1% | | | 98.2% | | |
| MPPT Efficiency | >99% | | | | | |
| **Equipment Protection** | | | | | | |
| DC Reverse Polarity Protection | Yes | | | | | |
| AC Output Overcurrent Protection | Yes | | | | | |
| AC Output Overvoltage Protection | Yes | | | | | |
| AC Output Short Circuit Protection | Yes | | | | | |
| Thermal Protection | Yes | | | | | |
| Insulation Impedance Detection | Yes | | | | | |
| DC Component Monitoring | Yes | | | | | |
| Arc Fault Circuit Interrupter (AFCI) | Optional | | | | | |
| Anti-islanding Protection | Yes | | | | | |
| Residual Current Detection | Yes | | | | | |
| Surge Protection Level | TYPE II(DC), TYPE II(AC) | | | | | |
| DC Switch | Yes | | | | | |
| **Interface** | | | | | | |
| Communication Interface | RS485/RS232 /WiFi/LAN | | | | | |
| LCD/LED Display | LCD 240 × 160 | | | | | |
| **General Data** | | | | | | |
| Operating Temperature Range (°C) | -25°C~60°C | | | | | |
| Permissible Ambient Humidity | 0-100% | | | | | |
| Permissible Altitude (m) | 4000m | | | | | |
| Noise (dB) | ≤55 | | | | | |
| Ingress Protection(IP) Rating | IP 65 | | | | | |
| Inverter Topology | Non-Isolated | | | | | |
| Over Voltage Category | OVC II(DC), OVC III(AC) | | | | | |
| Cabinet Size (WxHxD mm) | 824×516×312.7 (Excluding Connectors and Brackets) | | | | | |
| Weight (kg) | 81 | | | | | |
| Warranty | Standard 5 years, extended warranty | | | | | |
| Type of Cooling | Intelligent Air Cooling | | | | | |
| Grid Regulation | IEC 61727,IEC 62116,CEI 0-21,CEI 0-16,EN 50549 , NRS 097,RD 140,UNE 217002, OVE-Richtlinie R25,G99,VDE-AR-N 4105,VDE-AR-N 4110 | | | | | |
| Safety EMC/Standard | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 | | | | | |

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