

Three Phase Hybrid Inverter

SUN-29.9/30/35K-SG01HP3-EU-BM3

SUN-40/50K-SG01HP3-EU-BM4



- 100** 100% unbalanced output
-  AC couple to retrofit existing solar system
- 10** Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- 100** Max. charging/discharging current of 100A
- H** High voltage battery, higher efficiency
- 6** 6 time periods for battery charging/discharging
-  Support storing energy from diesel generator

Deye

Stock Code: 605117.SH

| Model | SUN-29.9K-9G04HP3 -EU-BM3 | SUN-30K-9G04HP3 -EU-BM3 | SUN-35K-9G04HP3 -EU-BM3 | SUN-40K-9G04HP3 -EU-BM4 | SUN-50K-9G04HP3 -EU-BM4 |
|--|---|----------------------------|----------------------------|----------------------------|----------------------------|
| Battery Input Data | | | | | |
| Battery Type | Lithium-ion | | | | |
| Battery Voltage Range (V) | 460-800 | | | | |
| Max. Charging Current (A) | 50+50 | | | | |
| Max. Discharging Current (A) | 50+50 | | | | |
| Charging Strategy for Li-ion Battery | Self-adaption to BMS | | | | |
| Number of Battery Input | 2 | | | | |
| PV String Input Data | | | | | |
| Max. PV Access Power (W) | 59800 | 60000 | 70000 | 80000 | 100000 |
| Max. PV Input Power (W) | 47840 | 48000 | 56000 | 64000 | 80000 |
| Max. PV Input Voltage (V) | 1000 | | | | |
| Start-up Voltage (V) | 180 | | | | |
| MPPT Voltage Range (V) | 150-850 | | | | |
| Rated PV Input Voltage (V) | 600 | | | | |
| Max. Operating PV Input Current (A) | 36+36+36 | | | 36+36+36+36 | |
| Max. Input Short-Circuit Current (A) | 55+55+55 | | | 55+55+55+55 | |
| No. of MPP Trackers/ No. of Strings MPP Tracker | 3/2+2+2 | | | 4/2+2+2+2 | |
| AC Input/Output Data | | | | | |
| Rated AC Input/Output Active Power (W) | 29900 | 30000 | 35000 | 40000 | 50000 |
| Max. AC Input/Output Apparent Power (VA) | 29900 | 33000 | 38500 | 44000 | 55000 |
| Rated AC Input/Output Current (A) | 45.4/43.4 | 45.5/43.5 | 53.1/50.8 | 60.7/58 | 75.8/72.5 |
| Max. AC Input/Output Current (A) | 45.4/43.4 | 50/47.9 | 58.4/55.8 | 66.7/63.8 | 83.4/79.8 |
| Max. Continuous AC Passthrough (grid to load) (A) | 200 | | | | |
| Peak Power (off-grid) (W) | 1.5 times of rated power, 10s | | | | |
| Power Factor Adjustment Range | 0.8 leading to 0.8 lagging | | | | |
| Rated Input/Output Voltage/Range (V) | 220/380V, 230/400V 0.85Un-1.1Un | | | | |
| Rated Input/Output Grid Frequency/Range(Hz) | 50/45-55, 60/55-65 | | | | |
| Grid Connection Form | 3L+N+PE | | | | |
| Total Current Harmonic Distortion THDi | <3% (of nominal power) | | | | |
| DC Injection Current | <0.5% In | | | | |
| Efficiency | | | | | |
| Max. Efficiency | 97.60% | | | | |
| Euro Efficiency | 97.0% | | | | |
| MPPT Efficiency | >99% | | | | |
| Equipment Protection | | | | | |
| Integrated | DC Reverse Polarity Protection, AC Output Overcurrent Protection, Thermal Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, DC Component Monitoring, Arc Fault Circuit Interrupter (optional), Anti-islanding Protection, DC Switch, Insulation Impedance Detection, Residual Current Detection | | | | |
| Surge Protection Level | TYPE II(DO), TYPE II(AC) | | | | |
| Interface | | | | | |
| Communication Interface | RS485/RS232/CAN | | | | |
| Monitor Mode | GPRS/WIFI/Bluetooth/4G/LAN(optional) | | | | |
| General Data | | | | | |
| Operating Temperature Range (°C) | -40 to +60°C, >45°C Derating | | | | |
| Permissible Ambient Humidity | 0-100% | | | | |
| Permissible Altitude | 2000m | | | | |
| Noise (dB) | ≤65 | | | | |
| Ingress Protection(IP) Rating | IP 65 | | | | |
| Inverter Topology | Non-Isolated | | | | |
| Over Voltage Category | OVC II(DO), OVC III(AC) | | | | |
| Cabinet Size (WxHxD mm) | 527×894×294 (Excluding Connectors and Brackets) | | | | |
| Weight (kg) | 80 | | | | |
| Type of Cooling | Intelligent Air Cooling | | | | |
| Warranty | 5 Years/10 Years the Warranty Period Depends the Final Installation Site of Inverter, More Info Please Refer to Warranty Policy | | | | |
| Grid Regulation | IEC 61727, IEC 62116, CEI 0-24, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105 | | | | |
| Safety / EMC Standard | IEC/EN 61000-6-4/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 | | | | |