

# Three Phase Hybrid Inverter

## SUN- 8 / 10 / 12 K-SG04LP3



**Deye**

*Clean Power For You*

- 100%** 100% unbalanced output, each phase  
Max. output up to **50%** rated power
- 48** 48V low voltage battery, transformer isolation design
- 6** 6 time periods for battery charging/discharging
- 240** Max. charging/discharging current of 240A
- 16** Frequency droop control, Max.16pcs parallel
-  DC couple and AC couple to retrofit existing solar system
-  Support storing energy from diesel generator

| Model                                       | SUN-8K-SG04LP3                                                          | SUN-10K-SG04LP3 | SUN-12K-SG04LP3 |
|---------------------------------------------|-------------------------------------------------------------------------|-----------------|-----------------|
| Battery Input Data                          |                                                                         |                 |                 |
| Battery Type                                | Lead-acid or Li-Ion                                                     |                 |                 |
| Battery Voltage Range (V)                   | 40~60V                                                                  |                 |                 |
| Max. Charging Current (A)                   | 190A                                                                    | 210A            | 240A            |
| Max. Discharging Current (A)                | 190A                                                                    | 210A            | 240A            |
| Charging Curve                              | 3 Stages / Equalization                                                 |                 |                 |
| External Temperature Sensor                 | Optional                                                                |                 |                 |
| Charging Strategy for Li-Ion Battery        | Self-adaption to BMS                                                    |                 |                 |
| PV String Input Data                        |                                                                         |                 |                 |
| Max. DC Input Power (W)                     | 10400W                                                                  | 13000W          | 15600W          |
| PV Input Voltage (V)                        | 550V (150V~800V)                                                        |                 |                 |
| MPPT Range (V)                              | 200V-650V                                                               |                 |                 |
| Start-up Voltage (V)                        | 160V                                                                    |                 |                 |
| PV Input Current (A)                        | 13A+13A                                                                 | 26A+13A         | 26A+13A         |
| No.of MPPT Trackers                         | 2                                                                       |                 |                 |
| No.of Strings Per MPPT Tracker              | 1+1                                                                     | 2+1             | 2+1             |
| AC Output Data                              |                                                                         |                 |                 |
| Rated AC Output and UPS Power (W)           | 8000W                                                                   | 10000W          | 12000W          |
| Max. AC Output Power (W)                    | 8800W                                                                   | 11000W          | 13200W          |
| Peak Power (off grid)                       | 2 times of rated power, 10 S                                            |                 |                 |
| AC Output Rated Current (A)                 | 12A                                                                     | 15A             | 18A             |
| Max. AC Current (A)                         | 18A                                                                     | 23A             | 27A             |
| Max. Continuous AC Passthrough (A)          | 50A                                                                     |                 |                 |
| Output Frequency and Voltage                | 50/60Hz; 230/400Vac (Three phase)                                       |                 |                 |
| Grid Type                                   | Three Phase                                                             |                 |                 |
| Current Harmonic Distortion                 | THD<3% (Linear load<1.5%)                                               |                 |                 |
| Efficiency                                  |                                                                         |                 |                 |
| Max. Efficiency                             | 97.60%                                                                  |                 |                 |
| Euro Efficiency                             | 97.00%                                                                  |                 |                 |
| MPPT Efficiency                             | 99.90%                                                                  |                 |                 |
| Protection                                  |                                                                         |                 |                 |
| PV Input Lightning Protection               | Integrated                                                              |                 |                 |
| Anti-islanding Protection                   | Integrated                                                              |                 |                 |
| PV String Input Reverse Polarity Protection | Integrated                                                              |                 |                 |
| Insulation Resistor Detection               | Integrated                                                              |                 |                 |
| Residual Current Monitoring Unit            | Integrated                                                              |                 |                 |
| Output Over Current Protection              | Integrated                                                              |                 |                 |
| Output Shorted Protection                   | Integrated                                                              |                 |                 |
| Output Over Voltage Protection              | Integrated                                                              |                 |                 |
| Surge protection                            | DC Type II / AC Type II                                                 |                 |                 |
| Certifications and Standards                |                                                                         |                 |                 |
| Grid Regulation                             | IEC61727, IEC62116, IEC60068, IEC61683, NRS 097-2-1                     |                 |                 |
| Safety EMC / Standard                       | IEC62109-1/-2, IEC61000-6-1, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12 |                 |                 |
| General Data                                |                                                                         |                 |                 |
| Operating Temperature Range (°C)            | -25~60°C, >45°C Derating                                                |                 |                 |
| Cooling                                     | Smart cooling                                                           |                 |                 |
| Noise (dB)                                  | <30 dB                                                                  |                 |                 |
| Communication with BMS                      | RS485; CAN                                                              |                 |                 |
| Weight (kg)                                 | 36.8                                                                    |                 |                 |
| Size (mm)                                   | 422W×658H×281D                                                          |                 |                 |
| Protection Degree                           | IP65                                                                    |                 |                 |
| Installation Style                          | Wall-mounted                                                            |                 |                 |
| Warranty                                    | 5 years                                                                 |                 |                 |