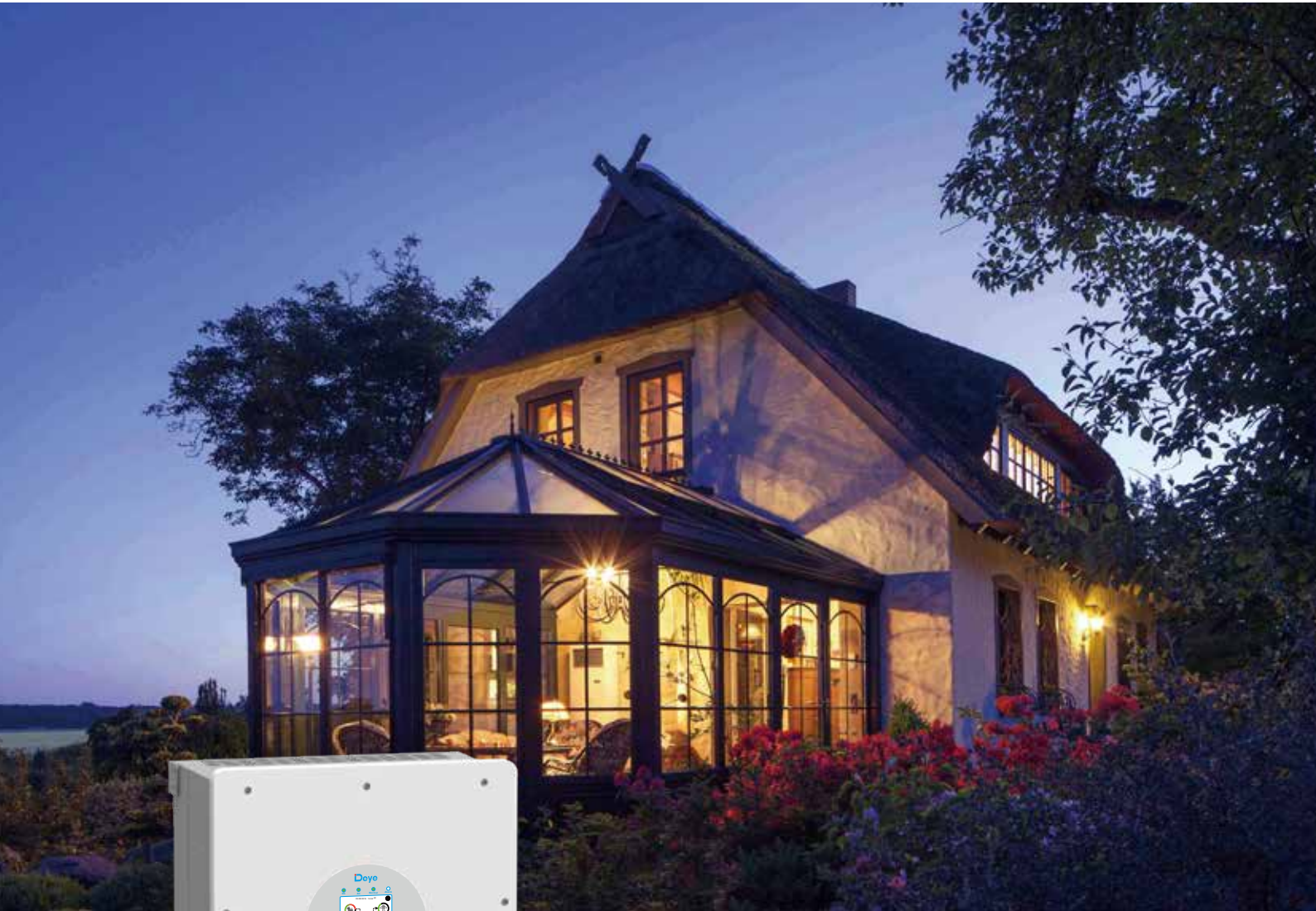


# Hybrid Inverter

SUN-12/14/16K-SG01LP1-EU



Colorful touch LCD, IP65 protection degree



DC couple and AC couple to retrofit existing solar system

16

Max. 16pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel

290

Max. charging/discharging current of 290A

6

6 time periods for battery charging/discharging



Support storing energy from diesel generator

**Deye**

Stock Code: 605117.SH

| Model                                | SUN-12K-SG01LP1-EU   | SUN-14K-SG01LP1-EU | SUN-16K-SG01LP1-EU |
|--------------------------------------|--|--------------------|--------------------|
| <b>Battery Data</b>                  |  |                    |                    |
| Battery Type                         | Lead-acid or Lithium-ion   |                    |                    |
| Battery Voltage Range (V)            | 40-60  |                    |                    |
| Max. Charging Current (A)            | 220  | 250                | 290                |
| Max. Discharging Current (A)         | 220  | 250                | 290                |
| External Temperature Sensor          | Yes  |                    |                    |
| Charging Curve                       | 3 Stages / Equalization  |                    |                    |
| Charging Strategy for Li-Ion Battery | Self-adaption to BMS   |                    |                    |
| <b>PV String Input Data</b>          |  |                    |                    |
| Max. DC Input Power (W)              | 15600  | 18200              | 20800              |
| Max. DC Input Voltage (V)            | 500  |                    |                    |
| Start-up Voltage (V)                 | 125  |                    |                    |
| MPPT Range (V)                       | 150-425  |                    |                    |
| Rated DC Input Voltage (V)           | 370  |                    |                    |
| PV Input Current (A)                 | 26+26+26   |                    |                    |
| Max. PV I <sub>SC</sub> (A)          | 44+44+44   |                    |                    |
| No. of MPP Trackers                  | 3  |                    |                    |
| No. of Strings per MPP Tracker       | 2+2+2  |                    |                    |
| <b>AC Output Data</b>                |  |                    |                    |
| Rated AC Output Active Power (W)     | 12000  | 14000              | 16000              |
| Max AC Output Active Power (W)       | 13200  | 15400              | 17600              |
| Rated AC Output Current (A)          | 54.5/52.2  | 63.6/60.9          | 72.7/69.6          |
| Max AC Output Current (A)            | 60/57.4  | 70/67              | 80/76.5            |
| Max. Continuous AC Passthrough (A)   | 100  |                    |                    |
| Peak Power (Off Grid)                | 2 time of rated power, 5 S   |                    |                    |
| Power Factor Adjustment Range        | 0.8 leading to 0.8 lagging   |                    |                    |
| Power Factor                         | 1  |                    |                    |
| Output Frequency and Voltage         | 50/60Hz; L/N/PE 220/230Vac   |                    |                    |
| Grid Type                            | Single Phase   |                    |                    |
| Total Harmonic Distortion (THD)      | <3% (of nominal power)   |                    |                    |
| DC Current Injection                 | <0.5% I <sub>n</sub>   |                    |                    |
| <b>Backup Data</b>                   |  |                    |                    |
| Backup Power (W)                     | 10000  | 12000              | 14000              |
| Backup Rated Current (A)             | 45.5/43.5  | 54.5/52.2          | 63.6/60.9          |
| Backup UPS                           | 4ms Automatic switchover time  |                    |                    |
| <b>Efficiency</b>                    |  |                    |                    |
| Max. Efficiency                      | 97.60%   |                    |                    |
| Euro Efficiency                      | 96.50%   |                    |                    |
| MPPT Efficiency                      | 99.90%   |                    |                    |
| Integrated                           | Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge Protection |                    |                    |
| Over Voltage Category                | DC Type II/AC Type III   |                    |                    |
| <b>Certifications and Standards</b>  |  |                    |                    |
| Grid Regulation                      | VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150  |                    |                    |
| Safety EMC / Standard                | IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2   |                    |                    |
| <b>General Data</b>                  |  |                    |                    |
| Operating Temperature Range ( )      | -40-60°C, >45°C derating   |                    |                    |
| Cooling                              | Smart Cooling  |                    |                    |
| Noise (dB)                           | ≤30 dB   |                    |                    |
| Communication with BMS               | RS485; CAN   |                    |                    |
| Weight (kg)                          | 48.5   |                    |                    |
| Size (mm)                            | 464W×798.4H×300D   |                    |                    |
| Protection Degree                    | IP65   |                    |                    |
| Installation Style                   | Wall-mounted   |                    |                    |
| Warranty                             | 5 Years (10 Years Optional)  |                    |                    |