

**30-60K**

# SOLARATOR SERIES

Operates Seamlessly with Generators: Experience Uninterrupted Power, Even in Areas with Grid Instability

## S6-EH3P(30-60)K-NV-YD-H-US

Three Phase | High Voltage

- High input current (40A) supports larger modules, improving power density and eliminating clipping
- More seamless system operation and resiliency with fast and automated battery charge/discharging
- Compatible with 100-280Ah battery modules, driving down system costs and enhancing flexibility, wide range for generator power as well
- Extremely flexible configurations, storage use mode features and battery options
- Supports 200% oversizing for maximizing PV utilization (60K: 166%)
- Easily add inverter capacity, PV or batteries to scale up as you grow thanks to dual input flexibility
- Stability during and after outages with 160% overload capacity

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## DATASHEET

| Models                                      | 30K03              | 40K04  | 50K04                                                                                                                                | 60K04   |
|---------------------------------------------|--------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------|---------|
| <b>Input DC (PV side)</b>                   |                    |        |                                                                                                                                      |         |
| Max. usable PV input power                  | 60 kW              | 80 kW  | 100 kW                                                                                                                               | 100 kW  |
| Max. input voltage                          |                    |        | 1000 V                                                                                                                               |         |
| Rated voltage                               |                    |        | 600 V                                                                                                                                |         |
| Start-up voltage                            |                    |        | 180 V                                                                                                                                |         |
| MPPT voltage range                          |                    |        | 150 - 850 V                                                                                                                          |         |
| Max. input current                          | 40 A / 40 A / 40 A |        | 4 × 40 A                                                                                                                             |         |
| Max. short circuit current                  | 65 A / 65 A / 65 A |        | 4 × 65 A                                                                                                                             |         |
| MPPT number / Max. input strings number     | 3 / 6              |        | 4 / 8                                                                                                                                |         |
| Max input power per MPPT                    |                    |        | 25 kW (600 V × 40 A)                                                                                                                 |         |
| <b>Battery</b>                              |                    |        |                                                                                                                                      |         |
| Battery type                                |                    |        | Li-ion                                                                                                                               |         |
| Battery voltage range                       |                    |        | 150 - 800 V                                                                                                                          |         |
| Max. charge / discharge power               | 33 kW              | 44 kW  | 55 kW                                                                                                                                | 60 kW   |
| Max. charge / discharge current             |                    |        | 70 A × 2 <sup>①</sup>                                                                                                                |         |
| Number of battery ports                     |                    |        | 2                                                                                                                                    |         |
| Max. charge / discharge power of each input | 33 kW              | 35 kW  | 35 kW                                                                                                                                | 35 kW   |
| Communication                               |                    |        | CAN / RS485                                                                                                                          |         |
| <b>Output AC (Grid side)</b>                |                    |        |                                                                                                                                      |         |
| Rated output power                          | 30 kW              | 40 kW  | 50 kW                                                                                                                                | 60 kW   |
| Max. apparent output power                  | 30 kVA             | 40 kVA | 50 kVA                                                                                                                               | 60 kVA  |
| Rated grid voltage                          |                    |        | 3/(N)/PE, 480 V                                                                                                                      |         |
| Rated grid frequency                        |                    |        | 60 Hz                                                                                                                                |         |
| Rated grid output current                   | 36.1 A             | 48.1 A | 60.1 A                                                                                                                               | 72.2 A  |
| Max. output current                         | 36.1 A             | 48.1 A | 60.1 A                                                                                                                               | 72.2 A  |
| Power factor                                |                    |        | > 0.99 (0.8 leading - 0.8 lagging)                                                                                                   |         |
| THDi                                        |                    |        | < 3%                                                                                                                                 |         |
| <b>Input AC (Grid side)</b>                 |                    |        |                                                                                                                                      |         |
| Max. AC passthrough current                 | 72.2 A             | 96.2 A | 120.2 A                                                                                                                              | 144.4 A |
| Rated input voltage                         |                    |        | 3/(N)/PE, 480 V                                                                                                                      |         |
| Rated input frequency                       |                    |        | 60 Hz                                                                                                                                |         |
| <b>Input Generator</b>                      |                    |        |                                                                                                                                      |         |
| Max. input power                            | 30 kW              | 40 kW  | 50 kW                                                                                                                                | 60 kW   |
| Max. input current                          | 36.1 A             | 48.1 A | 60.1 A                                                                                                                               | 72.2 A  |
| Rated input voltage                         |                    |        | 3/(N)/PE, 480 V                                                                                                                      |         |
| Rated input frequency                       |                    |        | 60 Hz                                                                                                                                |         |
| <b>Output AC (Back-up)</b>                  |                    |        |                                                                                                                                      |         |
| Rated output power                          | 30 kW              | 40 kW  | 50 kW                                                                                                                                | 60 kW   |
| Max. apparent output power                  |                    |        | 1.6 times of rated power with 2 s                                                                                                    |         |
| Back-up switch time                         |                    |        | < 10 ms                                                                                                                              |         |
| Rated output voltage                        |                    |        | 3/(N)/PE, 480 V                                                                                                                      |         |
| Rated frequency                             |                    |        | 60 Hz                                                                                                                                |         |
| Rated output current                        | 36.1 A             | 48.1 A | 60.1 A                                                                                                                               | 72.2 A  |
| Max. imbalance power per phase              |                    |        | 33% rated power                                                                                                                      |         |
| THDv (@linear load)                         |                    |        | < 2%                                                                                                                                 |         |
| <b>Efficiency</b>                           |                    |        |                                                                                                                                      |         |
| Max. efficiency                             |                    |        | 97.9%                                                                                                                                |         |
| CEC efficiency                              |                    |        | 97.4%                                                                                                                                |         |
| MPPT efficiency                             |                    |        | 99.9%                                                                                                                                |         |
| <b>Protection</b>                           |                    |        |                                                                                                                                      |         |
| Ground fault detection                      |                    |        | Yes                                                                                                                                  |         |
| Residual (leakage) current detection        |                    |        | Yes                                                                                                                                  |         |
| Integrated AFCI                             |                    |        | Yes                                                                                                                                  |         |
| DC reverse-polarity protection              |                    |        | Yes                                                                                                                                  |         |
| PV DC switch                                |                    |        | Yes                                                                                                                                  |         |
| Rapid shutdown NEC 2017                     |                    |        | Integrated SunSpec-certified Transmitter                                                                                             |         |
| Compatible RSD receivers                    |                    |        | See MLRSD Compatibility Sheet                                                                                                        |         |
| Protection class/Over voltage category      |                    |        | I / II                                                                                                                               |         |
| <b>General Data</b>                         |                    |        |                                                                                                                                      |         |
| Dimensions (W*H*D)                          |                    |        | 22 × 41.3 × 13.64 in (560 × 1050 × 346.5 mm)                                                                                         |         |
| Weight                                      |                    |        | 195.77 lbs (88.8 kg)                                                                                                                 |         |
| Topology                                    |                    |        | Transformerless                                                                                                                      |         |
| Self-consumption (night)                    |                    |        | < 35 W                                                                                                                               |         |
| Operating ambient temperature range         |                    |        | -13°F to 140°F (-25°C to 60°C)                                                                                                       |         |
| Relative humidity                           |                    |        | 0 - 100%                                                                                                                             |         |
| Ingress protection                          |                    |        | TYPE 4X                                                                                                                              |         |
| Cooling concept                             |                    |        | Intelligent fan-cooling                                                                                                              |         |
| Max. operation altitude                     |                    |        | 8,202 ft (2500 m)                                                                                                                    |         |
| Compliance                                  |                    |        | UL1741SB, IEEE1547-2018, UL1699B, UL1998, FCCPart15ClassB, California Rule21, Hawaii Rule 14H, NEC 690.12-2020, CAN/CSA C22.2107.1-1 |         |
| <b>Features</b>                             |                    |        |                                                                                                                                      |         |
| DC connection                               |                    |        | Spring clamp terminals                                                                                                               |         |
| Grid AC connection                          |                    |        | Screw type terminal block                                                                                                            |         |
| Back-up AC connection                       |                    |        | Spring clamp terminals                                                                                                               |         |
| Battery DC connection                       |                    |        | Spring clamp terminals                                                                                                               |         |
| Generator AC connection                     |                    |        | Spring clamp terminals                                                                                                               |         |
| Interface                                   |                    |        | 7.0" LCD display & Bluetooth + APP                                                                                                   |         |
| Monitoring platform                         |                    |        | SolisCloud (modbus map and API sharing available upon request)                                                                       |         |
| Revenue grade meter                         |                    |        | Integrated ANSI C12.20 option                                                                                                        |         |
| Communication                               |                    |        | CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN                                                                          |         |

① Supporting parallel 140A input.