

12 Jahre Garantie

# SunESS Power

All-in-One System



### All-in-One

- Modulare, kompakt und einfach
- Einfache Installation
- Flexible Batterierweiterung (5 kWh bis 40 kWh)



### Sicher und zuverlässig

- Kurzschlusschutz
- Optionale Lichtbogenfehlervermeidung (AFCI)
- Optionale schnelle Abschaltung (RSD)



Standhalten von 150% Einschaltstrom über 10 Sekunden



Unterstützung von 150% überdimensionierter PV-Leistung



Unterstützung von 100% asymmetrische Last



Ultraschneller Umschaltvorgang (10 ms) vom Netz- zum Inselbetriebszustand



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Unterstützung von Wärmepumpe (optional)

| System Parameters         |   |              |              |              |                             |                              |                              |                              |
|---------------------------|---|--------------|--------------|--------------|-----------------------------|------------------------------|------------------------------|------------------------------|
| Normal Output Power       | 5~15kW  |              |              |              |                             |                              |                              |                              |
| Anzahl der Batteriemodule | 1   | 2            | 3            | 4            | 5                           | 6                            | 7                            | 8                            |
| Batteriekapazität         | 5kWh  | 10kWh        | 15kWh        | 20kWh        | 25kWh                       | 30kWh                        | 35kWh                        | 40kWh                        |
| Abmessungen (B/H/T) mm    | 650/875/250   | 650/1190/250 | 650/1505/250 | 650/1820/250 | 650/1505/250<br>650/910/190 | 650/1505/250<br>650/1225/190 | 650/1820/250<br>650/1225/190 | 650/1820/250<br>650/1540/190 |
| Gesamtgewicht             | 98kg  | 150kg        | 202kg        | 254kg        | 202kg+119kg                 | 202kg+171kg                  | 254kg+171kg                  | 254kg+223kg                  |
| Operating temperature     | Discharging: -4°F to 122°F (-20°C to 50°C), Charging: 14°F to 122°F (-10°C to 50°C) |              |              |              |                             |                              |                              |                              |
| Relative humidity         | 5% to 95%, non-condensation   |              |              |              |                             |                              |                              |                              |
| Höhe                      | <4000m(>3000m derating)   |              |              |              |                             |                              |                              |                              |
| Cooling method            | Air cooling   |              |              |              |                             |                              |                              |                              |
| Noise emission            | <47dB   |              |              |              |                             |                              |                              |                              |
| Schutzart                 | IP65  |              |              |              |                             |                              |                              |                              |
| Installationsmethode      | Gestapelt / An der Wand gelehnt   |              |              |              |                             |                              |                              |                              |
| Safety standards          | EN 62109-1/EN 62109-2/EN 62477-1/EN 61000-6-1/EN61000-6-3                           |              |              |              |                             |                              |                              |                              |
| Grid standards            | EN 50549-1/VDE4105/VDE 0124/NC-RfG:2016/EIFS:2018/ToR Type A/ NA/EEA-NE7-CH2020     |              |              |              |                             |                              |                              |                              |
| Battery standards         | IEC62619/CE/UN38.3/VDE 2510-50/FCC/UL1973   |              |              |              |                             |                              |                              |                              |

## SunESS Power All-in-One

|  |                            |          |                 |                 |                 |                 |
|--|----------------------------|----------|-----------------|-----------------|-----------------|-----------------|
| <b>Battery Module</b>                          |                            |          |                 |                 |                 |                 |
| Battery Type                                   | LiFePO4                    |          |                 |                 |                 |                 |
| Nominal energy                                 | 5kWh                       |          |                 |                 |                 |                 |
| Usable energy                                  | 4.5kWh                     |          |                 |                 |                 |                 |
| Rated voltage                                  | 400V                       |          |                 |                 |                 |                 |
| Voltage range                                  | 350~450V                   |          |                 |                 |                 |                 |
| Rated charge/discharge power                   | 2.5kW                      |          |                 |                 |                 |                 |
| Peak output power                              | 4.2kW/20s                  |          |                 |                 |                 |                 |
| Weight   | 52kg                       |          |                 |                 |                 |                 |
| Dimensions (W/H/D)                             | 650/315/190mm              |          |                 |                 |                 |                 |
| <b>Inverter Module</b>                         | SW5KH3UT                   | SW6KH3UT | SW8KH3UT        | SW10KH3UT       | SW12KH3UT       | SW15KH3UT       |
| <b>PV Input Parameters</b>                     |                            |          |                 |                 |                 |                 |
| Max. Eingangsleistung                          | 8000W                      | 9000W    | 12000W          | 15000W          | 22500W          | 22500W          |
| Max. Eingangsspannung                          | 1000V                      |          |                 |                 |                 |                 |
| MPPT voltage range                             | 180~850V                   |          |                 |                 |                 |                 |
| Start-up voltage                               | 180V                       |          |                 |                 |                 |                 |
| Max. input current per MPPT                    | A: 15A                     | A: 15A   | A: 15A / B: 30A | A: 15A / B: 30A | A: 15A / B: 30A | A: 15A / B: 30A |
| Max. short-circuit current per MPPT            | A: 19A                     | A: 19A   | A: 19A / B: 38A | A: 19A / B: 38A | A: 19A / B: 38A | A: 19A / B: 38A |
| Number of MPPTs                                | 1                          | 1        | 2               | 2               | 2               | 2               |
| Number of input strings per MPPT               | A: 1                       | A: 1     | A: 1/ B: 2      | A: 1/ B: 2      | A: 1/ B: 2      | A: 1/ B: 2      |
| <b>Battery Input Parameters</b>                |                            |          |                 |                 |                 |                 |
| Support battery capacity                       | 5~40kWh                    |          |                 |                 |                 |                 |
| Rated battery voltage                          | 400V                       |          |                 |                 |                 |                 |
| Battery voltage range                          | 350~450V                   |          |                 |                 |                 |                 |
| Max. continuous charging current               | 23A                        |          |                 | 46A             |                 |                 |
| Max. continuous discharge current              | 23A                        |          |                 | 46A             |                 |                 |
| Max. discharge power                           | 5000W                      | 6000W    | 8000W           | 10000W          | 12000W          | 15000W          |
| Max. charging power                            | 5000W                      | 6000W    | 8000W           | 10000W          | 12000W          | 15000W          |
| <b>Output parameters(On-grid)</b>              |                            |          |                 |                 |                 |                 |
| Rated output power                             | 5000W                      | 6000W    | 8000W           | 10000W          | 12000W          | 15000W          |
| Max. output apparent power                     | 5500VA                     | 6600VA   | 8800VA          | 11000VA         | 13200VA         | 16500VA         |
| Max. input apparent power                      | 8000VA                     | 9000VA   | 12000VA         | 15000VA         | 18000VA         | 22500VA         |
| Rated output voltage                           | 220/380V 230/400V 3W/N/PE  |          |                 |                 |                 |                 |
| Rated output frequency                         | 50Hz                       |          |                 |                 |                 |                 |
| Max. output current                            | 8.4A                       | 10A      | 13.4A           | 16.7A           | 20A             | 25A             |
| Max. input current                             | 12.2A                      | 13.7A    | 18.2A           | 22.8A           | 27.4A           | 34.2A           |
| Power factor                                   | 0.8 leading to 0.8 lagging |          |                 |                 |                 |                 |
| THDi   | <3%                        |          |                 |                 |                 |                 |
| <b>Output parameters(Off-grid)</b>             |                            |          |                 |                 |                 |                 |
| Off-grid rated apparent power                  | 5000VA                     | 6000VA   | 8000VA          | 10000VA         | 12000VA         | 15000VA         |
| Max. output apparent power                     | 5500VA                     | 6600VA   | 8800VA          | 11000VA         | 13200VA         | 16500VA         |
| Max. output current                            | 7.6A                       | 10A      | 13.4A           | 16.7A           | 20A             | 25A             |
| Rated output voltage                           | 220/380V 230/400V 3W/N/PE  |          |                 |                 |                 |                 |
| Rated output frequency                         | 50Hz                       |          |                 |                 |                 |                 |
| THDv (@Linear Load)                            | <3%                        |          |                 |                 |                 |                 |
| <b>Efficiency</b>                              |                            |          |                 |                 |                 |                 |
| Max. efficiency                                | 97.4%                      | 97.4%    | 97.8%           | 97.8%           | 97.8%           | 97.8%           |
| Euro. Efficiency                               | 96.5%                      | 96.5%    | 96.8%           | 96.8%           | 97%             | 97%             |
| <b>Protection</b>                              |                            |          |                 |                 |                 |                 |
| Eingang DC-Schalter                            | Integrated                 |          |                 |                 |                 |                 |
| Detektion des Isolationswiderstands            | Integrated                 |          |                 |                 |                 |                 |
| Differenzstrom-Überwachung                     | Integrated                 |          |                 |                 |                 |                 |
| Input reverse polarity protection              | Yes                        |          |                 |                 |                 |                 |
| Anti-Islanding Protection                      | Yes                        |          |                 |                 |                 |                 |
| Over current protection                        | Yes                        |          |                 |                 |                 |                 |
| AC short circuit protection                    | Yes                        |          |                 |                 |                 |                 |
| AC Over voltage protection                     | Yes                        |          |                 |                 |                 |                 |
| AFCI(Arc Fault Circuit Interrupter) Protection | Optional                   |          |                 |                 |                 |                 |
| Dry contact remote scheduling                  | Yes                        |          |                 |                 |                 |                 |
| DC Surge Protection                            | Type II                    | Type II  | Type II         | Type II         | Type II         | Type II         |
| AC surge protection                            | Type II                    | Type II  | Type II         | Type II         | Type II         | Type II         |
| <b>Basic parameters</b>                        |                            |          |                 |                 |                 |                 |
| Display  | LED&APP                    |          |                 |                 |                 |                 |
| BMS communication method                       | CAN                        |          |                 |                 |                 |                 |
| Meter communication method                     | RS485                      |          |                 |                 |                 |                 |
| Monitoring method                              | WiFi/bluetooth             |          |                 |                 |                 |                 |
| Topology                                       | Transformerless            |          |                 |                 |                 |                 |
| Operating temperature range                    | -30~60 °C (>45°Cderating)  |          |                 |                 |                 |                 |
| Weight   | 41kg                       |          |                 |                 |                 |                 |
| Dimensions (W/H/D)                             | 650/480/250mm              |          |                 |                 |                 |                 |