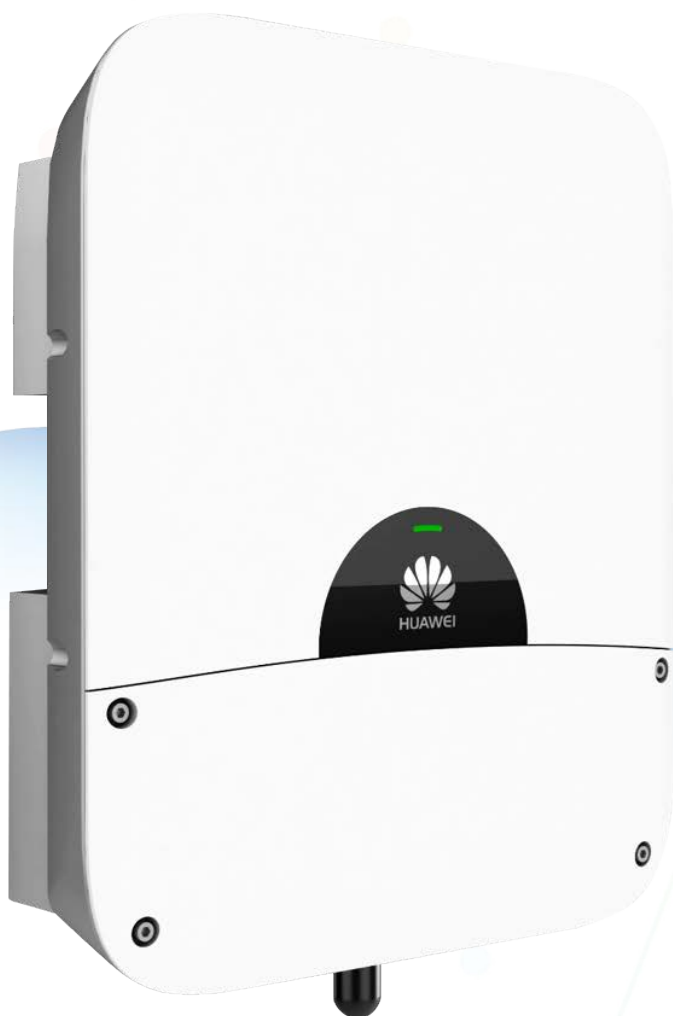


# Smart Energy Center

SUN2000-3.8/5/7.6/9/10/11.4KTL-USL0



## Higher Yields

- High-efficiency inverter topology, CEC efficiency 99%

## Simple & Easy

- Simple, elegant, single box design
- 7.6KTL 39.7 lb. (18 kg), easy installation by one technician
- No wearable parts like LCD, button or fans
- Modular design for easy Power Unit replacement

## Safe & Reliable

- Protection rating: TYPE 4X/IP65, natural convection
- Arc fault protection and rapid shutdown in compliance with NEC 2014 and 2017

## Future Proof

- Optimized for PV + Storage
- Energy storage interface for all sizes
- Battery ready for future expansion any time
- UL9540 certified for PV + Storage system
- Ready for rapid shutdown NEC 2017

# Smart Energy Center (SUN2000-3.8/5/7.6/9/10/11.4KTL-USL0)



| Technical Specification  | SUN2000-3.8KTL-USL0   | SUN2000-5KTL-USL0                | SUN2000-7.6KTL-USL0              | SUN2000-9KTL-USL0  | SUN2000-10KTL-USL0                | SUN2000-11.4KTL-USL0              |
|--|---|----------------------------------|----------------------------------|--|-----------------------------------|-----------------------------------|
| <b>Efficiency</b>  |   |                                  |                                  |  |                                   |                                   |
| Maximum efficiency   | 99%   |                                  |                                  |  |                                   |                                   |
| CEC weighted efficiency  | 99%   |                                  |                                  |  |                                   |                                   |
| <b>Input</b>   |   |                                  |                                  |  |                                   |                                   |
| Recommended DC power   | 5,130 Wp  | 6,750 Wp                         | 10,260 Wp                        | 12,150 Wp  | 13,500 Wp                         | 15,400 Wp                         |
| Maximum input voltage  | 500 Vdc   |                                  |                                  |  |                                   |                                   |
| Rated input voltage  | 370 Vdc   |                                  |                                  |  |                                   |                                   |
| Number of inputs   | 2   |                                  |                                  | 3  |                                   |                                   |
| Maximum input current  | 15 A x 2  |                                  |                                  | 15 A x 3   |                                   |                                   |
| <b>Output</b>  |   |                                  |                                  |  |                                   |                                   |
| Rated output power   | 3.3 kW @ 208 V<br>3.8 kW @ 240 V  | 4.3 kW @ 208 V<br>5.0 kW @ 240 V | 6.6 kW @ 208 V<br>7.6 kW @ 240 V | 7.8 kW @ 208 V<br>9.0 kW @ 240 V                         | 8.7 kW @ 208 V<br>10.0 kW @ 240 V | 9.9 kW @ 208 V<br>11.4 kW @ 240 V |
| Maximum output power   | 3.3 kW @ 208 V<br>3.8 kW @ 240 V  | 4.3 kW @ 208 V<br>5.0 kW @ 240 V | 6.6 kW @ 208 V<br>7.6 kW @ 240 V | 7.8 kW @ 208 V<br>9.0 kW @ 240 V                         | 8.7 kW @ 208 V<br>10.0 kW @ 240 V | 9.9 kW @ 208 V<br>11.4 kW @ 240 V |
| Rated output voltage   | 208 Vac, 240 Vac  |                                  |                                  |  |                                   |                                   |
| Rated AC grid frequency  | 60 Hz   |                                  |                                  |  |                                   |                                   |
| Maximum output current   | 15.9 A  | 20.9 A                           | 31.7 A                           | 37.5 A   | 41.7 A                            | 47.5 A                            |
| Adjustable power factor  | 0.8 leading ... 0.8 lagging   |                                  |                                  |  |                                   |                                   |
| Max. total harmonic distortion                                   | ≤ 3%  |                                  |                                  |  |                                   |                                   |
| <b>Feature</b>   |   |                                  |                                  |  |                                   |                                   |
| Revenue grade data ANSI C12.20                                   | 0.5% RGM  |                                  |                                  |  |                                   |                                   |
| Rapid shutdown – NEC 2014 and 2017 per article 690.11 and 690.12 | Yes   |                                  |                                  |  |                                   |                                   |
| <b>Protection</b>  |   |                                  |                                  |  |                                   |                                   |
| AFCI compliant to UL 1699B                                       | Yes   |                                  |                                  |  |                                   |                                   |
| DC disconnect device   | Yes   |                                  |                                  |  |                                   |                                   |
| Anti-islanding protection  | Yes   |                                  |                                  |  |                                   |                                   |
| DC reverse polarity protection                                   | Yes   |                                  |                                  |  |                                   |                                   |
| Insulation monitoring  | Yes   |                                  |                                  |  |                                   |                                   |
| DC surge arrester  | Yes   |                                  |                                  |  |                                   |                                   |
| AC surge arrester  | Yes   |                                  |                                  |  |                                   |                                   |
| Residual current detection                                       | Yes   |                                  |                                  |  |                                   |                                   |
| AC over-current protection                                       | Yes   |                                  |                                  |  |                                   |                                   |
| AC short-circuit current capability                              | Yes   |                                  |                                  |  |                                   |                                   |
| AC over-voltage protection                                       | Yes   |                                  |                                  |  |                                   |                                   |
| Over-heat protection   | Yes   |                                  |                                  |  |                                   |                                   |
| Ground-fault isolation detection                                 | Yes   |                                  |                                  |  |                                   |                                   |
| <b>General Specification</b>                                     |   |                                  |                                  |  |                                   |                                   |
| AC output & backup output conduit size                           | 0.75" Conduit   |                                  |                                  | 1.00" Conduit  |                                   |                                   |
| PV input, battery input conduit size                             | 0.75" Conduit   |                                  |                                  | 0.75" Conduit  |                                   |                                   |
| Communication input conduit size                                 | 0.75" Conduit   |                                  |                                  | 0.75" Conduit  |                                   |                                   |
| Operating temperature range                                      | -30°C ~ 60°C (-22°F ~ 140°F)  |                                  |                                  |  |                                   |                                   |
| Relative humidity  | 0 ~ 100% RH   |                                  |                                  |  |                                   |                                   |
| Transformerless  | Yes   |                                  |                                  |  |                                   |                                   |
| Cooling  | Natural convection  |                                  |                                  |  |                                   |                                   |
| Noise emission (typical)   | < 25 dB (A)   |                                  |                                  | < 29 dB (A)  |                                   |                                   |
| Display  | LED indicators  |                                  |                                  |  |                                   |                                   |
| Supported communication interface                                | RS485, WLAN, 4G (optional)  |                                  |                                  |  |                                   |                                   |
| Weight   | 39.7 lb. (18.0 kg)  |                                  |                                  | 50.7 lb. (23.0 kg)                                       |                                   |                                   |
| Dimensions (W x H x D)   | 15.8 in x 22.4 in x 6.3 in<br>(400 mm x 570 mm x 160 mm)                          |                                  |                                  | 17.5 in x 25.5 in x 6.3 in<br>(445 mm x 650 mm x 160 mm) |                                   |                                   |
| Protection rating  | TYPE 4X / IP65  |                                  |                                  |  |                                   |                                   |
| Self-consumption at night  | < 2.5 W (with battery enabling < 5 W)   |                                  |                                  |  |                                   |                                   |
| <b>Backup</b>  |   |                                  |                                  |  |                                   |                                   |
| Rated continuous output power                                    | 3.5 kVA @ 240 V   |                                  |                                  | 5 kVA @ 240 V  |                                   |                                   |
| Peak output power  | 3.8 kVA 10s @ 240 V   | 5 kVA 10s @ 240 V                |                                  | 7 kVA 10s @ 240 V  |                                   |                                   |
| <b>Battery Compatibility</b>                                     |   |                                  |                                  |  |                                   |                                   |
| Battery  | All series support LG Chem RESU 10H (Type-R)                                      |                                  |                                  |  |                                   |                                   |
| <b>Standards Compliance (more available upon request)</b>        |   |                                  |                                  |  |                                   |                                   |
| EMC  | FCC Part 15 Class B   |                                  |                                  |  |                                   |                                   |
| Safety   | UL 1741, UL 1741SA, UL 1998, UL 1699B, UL 62109-1, UL 9540, CAN/CSA C22.2 107.1-1 |                                  |                                  |  |                                   |                                   |
| Grid connection standards  | IEEE 1547A, CA Rule 21 (UL 1741SA)  |                                  |                                  |  |                                   |                                   |
| Others   | ANSI C12.20, Sunspec Certified™   |                                  |                                  |  |                                   |                                   |

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