

String Inverter (SUN2000-25KTL-US)



Smart

- 6 strings intelligent monitoring and 80% time save for fault detection
- Real-time operation monitoring
- Adaptive Edge MPPT for fast tracking

Efficient

- Highest efficiency 98.6% , CEC efficiency 98.0%
- Saving AC cable investment up to 20% without N-Line

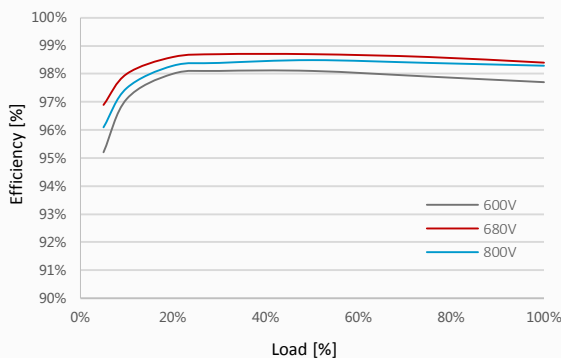
Safe

- Arc fault detection(according to UL 1699B)
- Integrated DC disconnect, safe and convenient for maintenance
- Ground fault protection
- Type II surge arrester for both DC and AC

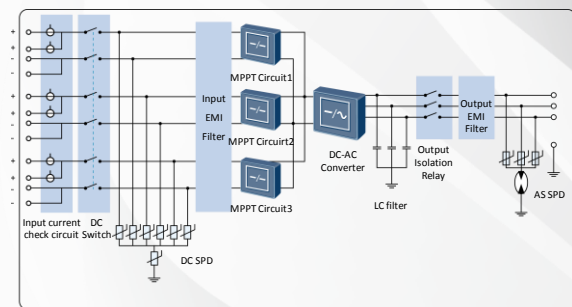
Reliable

- Warranty up to 25 years
- No need of external fan with natural cooling technology
- Outdoor application of NEMA 4
- Type II surge arrester for both DC and AC

Efficiency Curve



Circuit Diagram



SUN2000-30KTL-US

String Inverter (SUN2000-25KTL-US)



| Technical Specifications | SUN2000-25KTL-US |
|--------------------------------------|---|
| | Efficiency |
| Max. Efficiency | 98.6% |
| CEC Efficiency | 98.0% |
| | Input |
| Max. DC power | No limited (depended by the power of strings) |
| Max. Input Voltage | 1000 V |
| Max. Input Current per MPPT | 60 A (3*20A) |
| Max. Current per MPPT | 20A |
| Min. Operating Voltage | 280 V |
| MPP Voltage Range | 500 V~850 V |
| Rated Input Voltage | 720 V |
| Max. Number of Inputs | 6 |
| Number of MPP Trackers | 3 |
| | Output |
| Rated AC Output Power | 25000 W |
| Max. AC Output Power | 25000 VA |
| Max. Active Power (cosφ=1) | 25000 W |
| Rated Output Voltage | 3×277 V/480 V+PE |
| AC power frequency | 50 Hz/60 Hz |
| Max. Output Current | 30 A |
| Adjustable Power Factor | 0.8 LG ... 0.8 LD |
| Max. Total Harmonic Distortion | < 3% |
| | Protection |
| Input-side Disconnection Device | Yes |
| Anti-Islanding Protection | Yes |
| AC Over Current Protection | Yes |
| DC Over current Protection | Fuseless |
| DC Reverse-polarity Protection | Yes |
| PV-array String Fault Monitoring | Yes |
| DC Surge Arresters | Type II |
| AC Surge Arresters | Type II |
| Insulation Monitoring | Yes |
| Residual Current Detection | Yes |
| | Communication |
| RS485 | Yes |
| USB | Yes |
| Bluetooth | Optional |
| | General |
| Dimensions (W×H×D) | 550×770×270 mm (21.7×30.3×10.6 inch) |
| Weight | 54 kg (119 lb) |
| Operation Temperature Range | -25 °C ~ 60 °C (-13°F - 140°F) |
| Cooling | Natural Convection |
| Operating Altitude | 4000 m |
| Relative Humidity (Non-condensing) | 0~100% |
| DC Connectors | MC4 connector |
| AC Connectors | Spring Clamp Terminal |
| Degree of Protection | NEMA 4 |
| Self-consumption at Night | < 1 W |
| Topology | Transformerless |
| Noise Emission | 32 dB |
| Warranty | 10 years, 15/20/25 years optional |
| | Standards Compliance |
| Safety/EMC | UL 1741, UL 1699B, IEEE 1547, CSA C22.2 #107.1-01,FCC Part 15 |