

Smart String Inverter (SUN2000-60KTL-HV-D1-001)



Smart

- 4 MPPTs for versatile adaptations to different layouts
- 8 strings intelligent monitoring and fast trouble-shooting
- Power Line Communication (PLC) supported
- Smart String I-V Diagnosis supported

Safe

- DC disconnect integrated, safe and convenient for maintenance
- Type II surge arresters for both DC and AC
- Ground fault protection
- Residual Current Monitoring Unit (RCMU) integrated inside

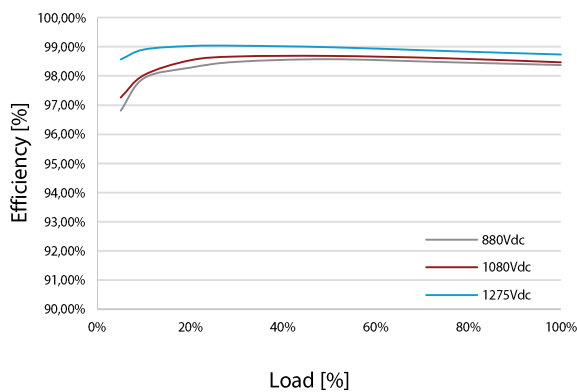
Efficient

- Max. efficiency 99.0%, European efficiency 98.8%
- 800V output voltage and decrease 75% AC wire loss versus 400V
- Without N Line and save more AC cable

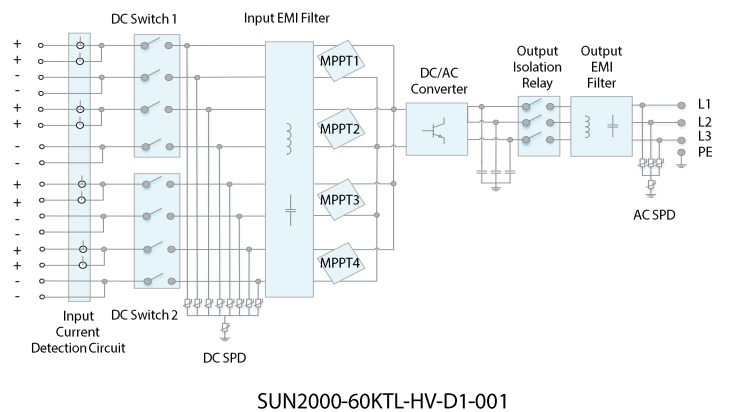
Reliable

- No need for external fans with natural cooling technology
- Protection rating of IP65

Efficiency Curve



Circuit Diagram



Smart String Inverter (SUN2000-60KTL-HV-D1-001)



| Technical Specifications | SUN2000-60KTL-HV-D1-001 |
|--|--|
| | Efficiency |
| Max. Efficiency | 99.0% |
| European Efficiency | 98.8% |
| | Input |
| Max. DC Usable Power | 67,300 W |
| Max. Input Voltage | 1,500 V |
| Max. Current per MPPT | 22 A |
| Max. Short Circuit Current per MPPT | 30 A |
| Min. Operating Voltage / Start Input Voltage | 600V / 650V |
| MPPT Operating Voltage Range | 600 V ~ 1,450 V |
| Rated Input Voltage | 1,080 V |
| Max. Number of Inputs | 8 |
| Number of MPP Trackers | 4 |
| | Output |
| Rated AC Active Power | 60,000 W |
| Max. AC Apparent Power | 66,000 VA |
| Max. AC Active Power (cosφ=1) | 66,000 W |
| Rated Output Voltage | 800V, 3W+PE |
| Rated Output Current | 43.3 A |
| Rated AC Grid Frequency | 50 Hz / 60 Hz |
| Max. Output Current | 48 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 Overcurrent Protection | Yes |
| DC Reverse-Polarity Protection | Yes |
| PV-array String Fault Monitoring | Yes |
| DC Surge Arrester | Type II |
| AC Surge Arrester | Type II |
| Insulation Detection | Yes |
| Residual Current Monitoring Unit | Yes |
| | Communication |
| Display | LED Indicators |
| RS485 | Yes |
| USB / Bluetooth + APP | Yes |
| Power Line Communication (PLC) | Yes |
| | General |
| Dimensions (W×H×D) | 930 × 600 × 270 mm (36.6×23.6×10.6 inches) |
| Weight | 62 kg (136.7 lb.) |
| Operation Temperature Range | -25 °C ~ 60 °C (-13°F ~ +140°F) |
| Cooling | Natural Convection |
| Max. Operating Altitude | 4,000 m (13,123 ft) |
| Relative Humidity | 0 ~ 100% |
| DC Connector | Amphenol UTX |
| AC Connector | Waterproof PG Terminal + OT Connector |
| Protection Rating | IP65 |
| Topology | Transformerless |
| | Standards Compliance |
| Safety | EN/IEC 62109-1, EN/IEC 62109-2 |
| Grid Code | IEC 61727, IEC62116, VDE-AR-N4105, VDE 0126-1-1, BDEW 2008, G59/3, UTE C 15-712-1, CEI 0-16, CEI 0-21, RD 661/2007, RD 1699/2011, RD 413/2014, PO 12.3, EN-50438-Turkey, EN-50438-Ireland, PEA, Resolution No.7, NRS 097-2-1 |

