

Smart String Inverter

SUN2000-42KTL



Smart

- 8 strings intelligent monitoring and fast trouble-shooting
- Power Line Communication (PLC) supported
- Smart I-V Curve Diagnosis supported

Efficient

- Max. efficiency 98.8%
- European efficiency 98.6%
- 4 MPPT per unit, effectively reducing string mismatch

Safe

- DC switch integrated, safe and convenient for maintenance
- Residual Current Monitoring Unit (RCMU) integrated
- Fuse free design

Reliable

- Natural cooling technology
- Protection degree of IP65
- Type II surge arresters for both DC and AC

RESPECT THE POWER OF SUN

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| Technical Specifications | SUN2000-42KTL |
|---|--|
| Efficiency | |
| Max. Efficiency | 98.8% |
| European Efficiency | 98.6% |
| Input | |
| Max. Input Voltage | 1,100 V |
| Max. Current per MPPT | 22 A |
| Max. Short Circuit Current per MPPT | 30 A |
| Start Voltage | 250 V |
| MPPT Operating Voltage Range | 200 V ~ 1,000 V |
| Rated Input Voltage | 720 V |
| Number of Inputs | 8 |
| Number of MPP Trackers | 4 |
| Output | |
| Rated AC Active Power | 42,000 W |
| Max. AC Apparent Power | 47,000 VA |
| Max. AC Active Power (cosφ=1) | Default 47,000 W; 42,000 W optional in settings |
| Rated Output Voltage | 480 V, 3W + PE |
| Rated AC Grid Frequency | 50 Hz / 60 Hz |
| Rated Output Current | 50.6 A |
| Max. Output Current | 56.6 A |
| Adjustable Power Factor Range | 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 |
| DC Insulation Resistance Detection | Yes |
| Residual Current Monitoring Unit | Yes |
| Communication | |
| Display | LED Indicators, Bluetooth + APP |
| RS485 | Yes |
| USB | Yes |
| Power Line Communication (PLC) | Yes |
| General | |
| Dimensions (W x H x D) | 930 × 550 × 283 mm (36.6 x 21.7 x 11.1 inch) |
| Weight (with mounting plate) | 62 kg (136.7 lb.) |
| Operating Temperature Range | -25°C ~ 60°C (-13°F ~ 140°F) |
| Cooling Method | Natural Convection |
| Max. Operating Altitude | 4,000 m (13,123 ft.) |
| Relative Humidity | 0 ~ 100% |
| DC Connector | Amphenol Helios H4 |
| AC Connector | Waterproof PG Terminal + OT Connector |
| Protection Degree | IP65 |
| Topology | Transformerless |
| Standard Compliance -more available upon request | |
| Certificate | EN 62109-1/-2, IEC 62109-1/-2, IEC 62116, IEC 60068, IEC 61683 |
| Grid Code | IEC 61727, AS/NZS 4777.2, G59/3, PEA, MEA, Resolution No.7 |

