Smart String Inverter
SUN2000-105KTL-H1

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

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

Efficient
- Max. efficiency 99.0%
- European Efficiency 98.8%
- 6 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
## Technical Specifications

### SUN2000-105KTL-H1

| Efficiency | Max. Efficiency: 99.0% | European Efficiency: 98.8% |
| Max. Input Voltage | 1,500 V |  |
| Max. Current per MPPT | 25 A |  |
| Max. Short Circuit Current per MPPT | 33 A |  |
| Start Voltage | 650 V |  |
| MPPT Operating Voltage Range | 600 V ~ 1,500 V |  |
| Rated Input Voltage | 1,080 V |  |
| Number of Inputs | 12 |  |
| Number of MPP Trackers | 6 |  |

### Output

| Rated AC Active Power | 105,000 W @40°C |  |
| Max. AC Apparent Power | 116,000 VA @25°C |  |
| Max. AC Active Power (cosφ=1) | 116,000 W @25°C |  |
| Rated Output Voltage | 800 V, 3W + PE |  |
| Rated AC Grid Frequency | 50 Hz / 60 Hz |  |
| Rated Output Current | 75.8 A |  |
| Max. Output Current | 84.6 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): 1,075 x 605 x 310 mm (42.3 x 23.8 x 12.2 inch)
- Weight (with mounting plate): 79 kg (174.2 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 UTX
- AC Connector: Cable gland + OT/DT terminal
- Protection Degree: IP65
- Topology: Transformerless

### Standard Compliance (more available upon request)

- Certificate: EN 62109-1/-2, IEC 62109-1/-2
- Grid Code: ABNT NBR 16149, ABNT NBR 16150, ABNT NBR ICE 62116, RD 1699, RD 661, RD 413, P.O. 12.3, UTE C 15-712-1, G59/3, CEI 0-16

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### Efficiency Curve

- Efficiency: 90% to 100% across a range of voltages (880 V to 1,300 V).

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### Circuit Diagram

- Depicts the internal components and connections of the SUN2000-105KTL-H1 inverter, showing the flow of electrical signals from inputs to outputs.