

# Smart String Inverter (SUN2000-33KTL-A)



## 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

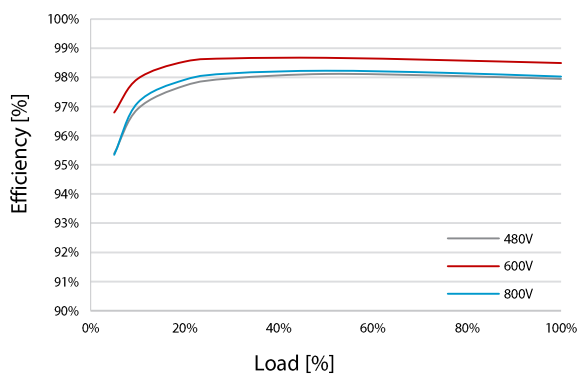
## Efficient

- Max. efficiency 98.6%, European efficiency 98.4%

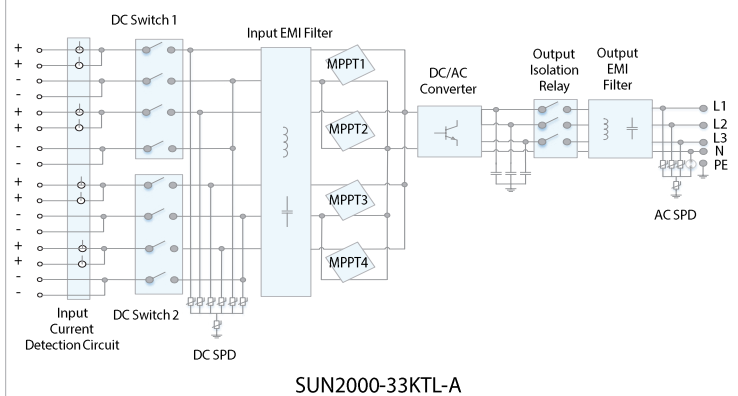
## Reliable

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

### Efficiency Curve



### Circuit Diagram



SUN2000-33KTL-A



# Smart String Inverter (SUN2000-33KTL-A)



Technical Specifications	SUN2000-33KTL-A
<b>Efficiency</b>	
Max. Efficiency	98.6%
European Efficiency	98.4%
<b>Input</b>	
Max. DC Usable Power	30,600 W
Max. Input Voltage	1100V
Max. Current per MPPT	22A
Max. Short Circuit Current per MPPT	30A
Min. Operating Voltage / Start Input Voltage	200 V / 250 V
Full Power MPPT Voltage Range	480 V ~ 800 V
MPPT Operating Voltage Range	200 V ~ 1000 V
Rated Input Voltage	620 V
Max. Number of Inputs	8
Number of MPP Trackers	4
<b>Output</b>	
Rated AC Active Power	30,000 W
Max. AC Apparent Power	33,000 VA
Max. AC Active Power (cosφ=1)	30,000W
Rated Output Voltage	230V / 400V, default 3W+N+PE;
Rated AC Grid Frequency	50 Hz / 60 Hz
Max. Output Current (@400V)	48 A
Adjustable Power Factor	0.8 LG ... 0.8 LD
Max. Total Harmonic Distortion	< 3%
<b>Protection</b>	
Input-side Disconnection Device	Yes
Anti-Islanding 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
<b>Communication</b>	
Display	LED Indicators
USB / Bluetooth +APP	Yes
RS485	Yes
PLC	Yes
<b>General</b>	
Dimensions ( W×H×D, with mounting plate )	930 × 550 × 283 mm (36.6 x 21.7 x 11.1 inches)
Weight	60 kg (132.3 lb.), without mounting plate 62 kg (136.7 lb.), with mounting plate
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 Helios H4
AC Connector	Waterproof PG Terminal + OT Connector
Protection Rating	IP65
Topology	Transformerless
<b>Standards Compliance</b>	
Safety	EN/IEC 62109-1, EN/IEC 62109-2

