

# Smart String Inverter

SUN2000-33/36/40KTL-  
US



## Smart

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

## Efficient

- Max. efficiency 98.9%
- CEC. efficiency 98.5%

## Safe

- DC AFCI compliant to UL 1699B Type I
- Type II surge arresters for both DC and AC
- Residual Current Detection (RCD) protection

## Reliable

- Natural cooling technology
- Fuse free design
- Protection rating of NEMA Type 4X

# Smart String Inverter (SUN2000-33/36/40KTL-US)



Technical Specifications	SUN2000-33KTL-US	SUN2000-36KTL-US	SUN2000-40KTL-US
<b>Efficiency</b>			
Max. Efficiency	98.9%	98.9%	98.9%
CEC. Efficiency	98.5%	98.5%	98.5%
<b>Input</b>			
Max. Input Voltage	1,000 V	1,000 V	1,000 V
Max. Current per MPPT	22 A	22 A	22 A
Max. Short Circuit Current per MPPT	30 A	30 A	30 A
Start Voltage	250 V	250 V	250 V
Full Power MPPT Voltage Range	460 V ~ 850 V	490 V ~ 850 V	530 V ~ 850 V
MPPT Operating Voltage Range	200 V ~ 1,000 V	200 V ~ 1,000 V	200 V ~ 1,000 V
Max. Number of Inputs	8	8	8
Number of MPP Trackers	4	4	4
<b>Output</b>			
Rated AC Active Power	33,300 W	36,000 W	40,000 W
Max. AC Apparent Power	36,600 VA	40,000 VA	44,000 VA
Max. AC Active Power (cosφ=1)	36,600 W	40,000 W	44,000 W
Rated Output Voltage	480 Vac, 3W+PE / 3W+N+PE	480 Vac, 3W+PE / 3W+N+PE	480 Vac, 3W+PE / 3W+N+PE
Rated AC Grid Frequency	60 Hz	60 Hz	60 Hz
Max. Output Current	44.1 A	48.2 A	53 A
Adjustable Power Factor	0.8 LG ... 0.8 LD	0.8 LG ... 0.8 LD	0.8 LG ... 0.8 LD
Max. Total Harmonic Distortion	< 3%	< 3%	< 3%
<b>Protection</b>			
DC Arc Fault Circuit Interrupter	Yes, compliant to UL 1699B Type I		
Input-side Disconnection Device	Yes		
Anti-Islanding Protection	Yes		
DC Reverse-Polarity Protection	Yes		
AC Overcurrent Protection	Yes		
PV-array String Fault Monitoring	Yes		
DC Surge Arrester	Type II		
AC Surge Arrester	Type II		
DC Insulation Detection	Yes		
Residual Current Detection	Yes		
<b>Communication</b>			
Display	LED Indicators		
USB / Bluetooth + APP	Yes		
RS485	Yes		
Power Line Communication (PLC)	Yes		
<b>General</b>			
Dimensions (W×H×D, With Mounting Plate)	36.6 inch × 21.7 inch × 11.1 inch (930 mm × 550 mm × 283 mm)		
Weight (With Mounting Plate)	137 lb. (62 kg)		
Ambient Temperature Range	-40°F ~ 140°F (-40°C ~ 60°C)		
Cooling	Natural Convection		
Max. Operating Altitude	13,123 ft. (4,000 m)		
Relative Humidity	0 ~ 100%		
DC Connector	Amphenol Helios H4 or MC4		
AC Connector	Waterproof PG Terminal + OT Connector		
Protection Rating	NEMA Type 4X		
Topology	Transformerless		
<b>Standards Compliance</b>			
Safety / EMC	UL 1741, UL 1699B, CSA C22.2 #107.1-01, FCC Part 15		
Grid Code	IEEE 1547, IEEE 1547a, Rule 21		

