

String Inverter (SUN2000-25KTL-US)



Smart

- 6 strings intelligent monitoring and 80% time saving for fault detection
- Real-time operation monitoring
- Adaptive Edge MPPT for fast tracking

Efficient

- Max. efficiency 98.6%, CEC efficiency 98.0%
- Saving AC cable investment up to 20% without N-Line

Safe

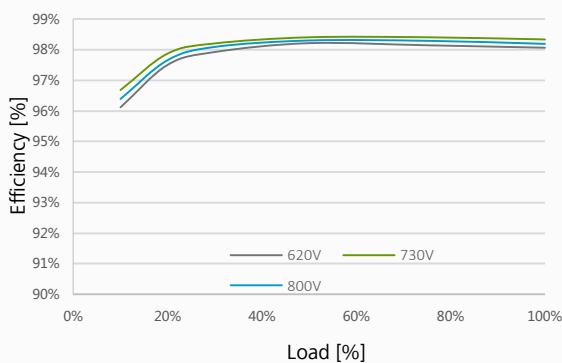
- DC AFCI compliant to UL 1699B
- DC disconnect Integrated, safe and convenient for maintenance
- Ground fault protection
- Category C surge arresters for both DC and AC

Reliable

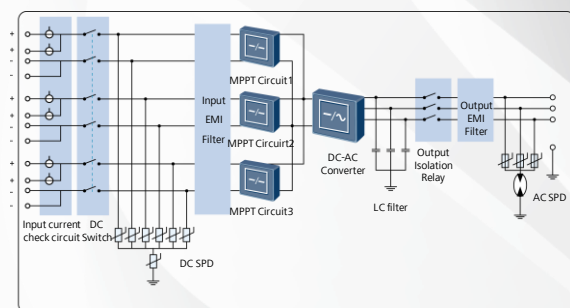
- No need for external fans with natural cooling technology
- Outdoor application of NEMA 4X



Efficiency Curve



Circuit Diagram



SUN2000-25KTL-US



String Inverter (SUN2000-25KTL-US)



Technical Specifications	SUN2000-25KTL-US
	Efficiency
Max. Efficiency	98.6%
CEC Efficiency	98.0%
	Input
Max. DC Voltage	1,000 V
Max. Current per MPPT	25A
Min. Operating Voltage	200 V
Full Power MPPT Voltage Range	560 V~850 V
MPPT Operating Voltage Range	200 V~950 V
Rated Input Voltage	730 V
Max. Number of Inputs	6
Number of MPP Trackers	3
	Output
Rated AC Power	25,000 W
Max. AC Apparent Power	27,500 VA
Max. AC Active Power (cosφ=1)	25,000 W
Rated Output Voltage	277V/480V, 3W+PE/3W+N+PE
Rated AC Grid Frequency	60 Hz
Max. Output Current	33 A
Adjustable Power Factor	0.8 LG ... 0.8 LD
Max. Total Harmonic Distortion	< 3%
	Protection
DC AFCI Compliant to UL 1699B	Yes
Input-side Disconnection Device	Yes
Anti-Islanding Protection	Yes
AC Overcurrent Protection	Yes
DC Overcurrent Protection	Fuseless
DC Reverse-Polarity Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arrester	Category C
AC Surge Arrester	Category C
Insulation Monitoring	Yes
Residual Current Detection	Yes
	Communication
RS485	Yes
USB	Yes
	General
Dimensions (W×H×D)	550×770×270 mm (21.7×30.3×10.6 inch)
Weight	55 kg (121 lb)
Operation Temperature Range	-25 °C ~ 60 °C (-13°F - 140°F)
Cooling	Natural Convection
Operating Altitude	4,000 m (13,123 ft)
Relative Humidity	0~100%
DC Connector	Amphenol H4
AC Connector	Waterproof PG Terminal + OT Connector
Protection Rating	NEMA 4X
Internal Consumption at Night	< 1 W
Topology	Transformerless
Noise Emission (Typical)	<33 dB
	Standards Compliance
Safety/EMC	UL 1741, UL 1699B, UL 1998, IEEE 1547, CSA C22.2 #107.1-01, FCC Part 15
Grid Code	IEEE 1547, IEEE 1547.1

