

String Inverter (SUN2000-30KTL-US)



Smart

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

Efficient

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

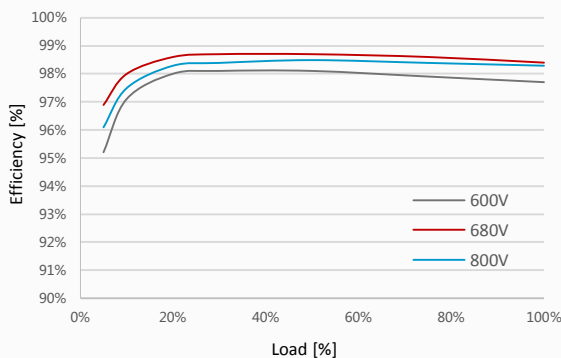
Safe

- Arc fault detection(according to UL 1699B)
- Integrated DC disconnect, safe and convenient for maintenance
- Ground fault protection
- Type II surge arrester for both DC and AC

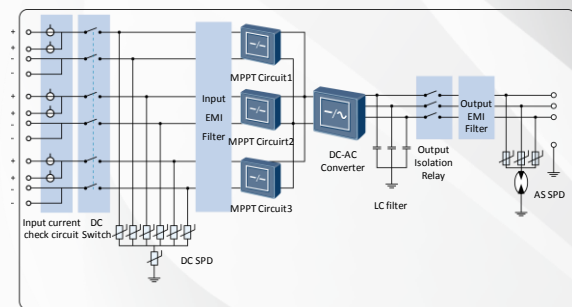
Reliable

- Warranty up to 25 years
- No need of external fan with natural cooling technology
- Outdoor application of NEMA 4
- Type II surge arrester for both DC and AC

Efficiency Curve



Circuit Diagram



SUN2000-30KTL-US

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Technical Specifications	SUN2000-30KTL-US
	Efficiency
Max. Efficiency	98.6%
CEC Efficiency	98.0%
	Input
Max. DC power	No limited (depended by the power of strings)
Max. Input Voltage	1000 V
Max. Input Current per MPPT	60 A (3*20A)
Max. Current per MPPT	20A
Min. Operating Voltage	280 V
MPP Voltage Range	500 V~850 V
Rated Input Voltage	720 V
Max. Number of Inputs	6
Number of MPP Trackers	3
	Output
Rated AC Output Power	30000 W
Max. AC Output Power	30000 VA
Max. Active Power (cosφ=1)	30000 W
Rated Output Voltage	3×277 V/480 V+PE
AC power frequency	50 Hz/60 Hz
Max. Output Current	36 A
Adjustable Power Factor	0.8 LG ... 0.8 LD
Max. Total Harmonic Distortion	< 3%
	Protection
Input-side Disconnection Device	Yes
Anti-Islanding Protection	Yes
AC Over Current Protection	Yes
DC Over current Protection	Fuseless
DC Reverse-polarity Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arresters	Type II
AC Surge Arresters	Type II
Insulation Monitoring	Yes
Residual Current Detection	Yes
	Communication
RS485	Yes
USB	Yes
Bluetooth	Optional
	General
Dimensions (W×H×D)	550×770×270 mm (21.7×30.3×10.6 inch)
Weight	54 kg (119 lb)
Operation Temperature Range	-25 °C ~ 60 °C (-13°F - 140°F)
Cooling	Natural Convection
Operating Altitude	4000 m
Relative Humidity (Non-condensing)	0~100%
DC Connectors	MC4 connector
AC Connectors	Spring Clamp Terminal
Degree of Protection	NEMA 4
Self-consumption at Night	< 1 W
Topology	Transformerless
Noise Emission	32 dB
Warranty	10 years, 15/20/25 years optional
	Standards Compliance
Safety/EMC	UL 1741, UL 1699B, IEEE 1547, CSA C22.2 #107.1-01,FCC Part 15