

Smart String Inverter

SUN2000-42KTL



Smart

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

Efficient

- Max. efficiency 98.8%, European efficiency 98.6%
- 4 MPPTs for versatile adaptations to different layouts

Safe

- DC disconnect integrated, safe and convenient for maintenance
- Type II surge arresters for both DC and AC
- Residual Current Monitoring Unit (RCMU) integrated inside
- Fuse free design

Reliable

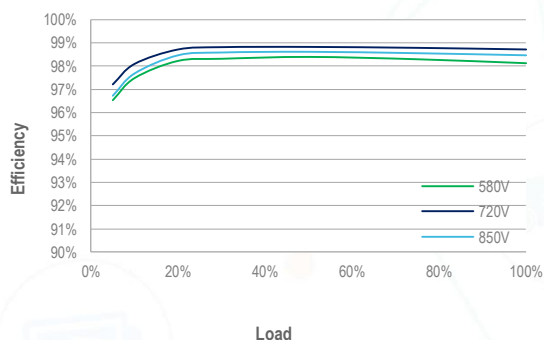
- Natural cooling technology
- Protection rating of IP65

Smart String Inverter (SUN2000-42KTL)

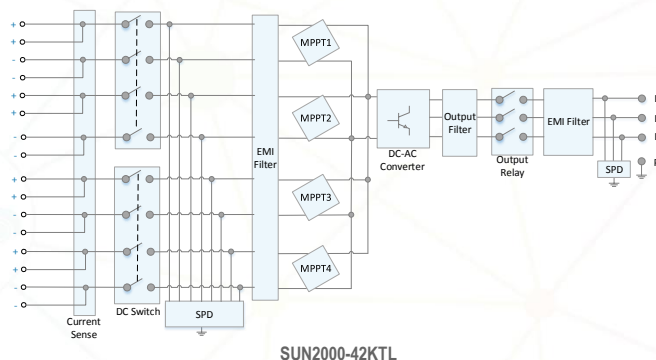


Technical Specifications	SUN2000-42KTL
	Efficiency
Max. Efficiency	98.8%
European Efficiency	98.6%
	Input
Max. Input Voltage	1,100 V
Max. Current per MPPT	22 A
Max. Short Circuit Current per MPPT	30 A
Start Voltage	250 V
MPPT Operating Voltage Range	200 V ~ 1000 V
Rated Input Voltage	720 V
Max. Number of Inputs	8
Number of MPP Trackers	4
	Output
Rated AC Active Power	42,000 W
Max. AC Apparent Power	47,000 VA
Max. AC Active Power (cosφ=1)	Default 47,000 W; 42,000 W optional in settings
Rated Output Voltage	480 V, 3W+PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Rated Output Current	50.6 A
Max. Output Current	56.6 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 Overcurrent 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
	Communication
Display	LED Indicators, Bluetooth +APP
USB	Yes
RS485	Yes
PLC	Yes
	General
Dimensions(W x H x D)	930 x 550 x 283 mm (36.6 x 21.7 x 11.1 inches)
Weight (with mounting plate)	62 kg (136.7 lb.)
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
	Standard & Compliance <i>(more available upon request)</i>
Certificate	EN/IEC 62109-1, EN/IEC 62109-2, IEC62116
Grid Code	IEC 61727, G59/3, UTE C 15-712-1, CEI 0-16, CEI 0-21, RD661/2007, RD 1699/2011, RD 413/2014, PO 12.3, EN-50438-Turkey, EN-50438-Ireland, PEA, Resolution No.7, NRS 097-2-1

Efficiency Curve



Circuit Diagram



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