

SUN2000-60KTL-M0 Smart PV Controller



Smart

12 strings intelligent monitoring



Efficient

Max. efficiency 98.7%



Safe

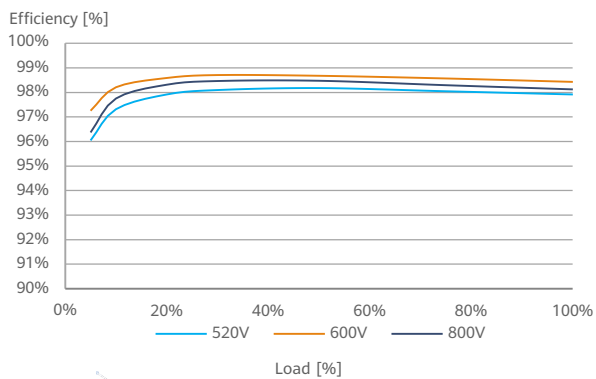
Fuse free design



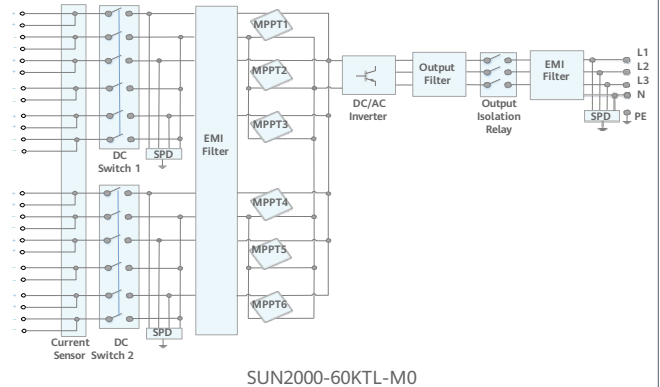
Reliable

Type II surge arresters for DC & AC

Efficiency Curve



Circuit Diagram



Technical Specification	SUN2000-60KTL-M0
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Efficiency	
Max. efficiency	98.9% @480 V; 98.7% @380 V / 400 V
European efficiency	98.7% @480 V; 98.5% @380 V / 400 V

Input	
Max. Input Voltage ¹	1,100 V
Max. Current per MPPT	22 A (per MPPT) / 18 A (per Input)
Max. Short Circuit Current per MPPT	30 A
Start Voltage	200 V
MPPT Operating Voltage Range ²	200 V ~ 1,000 V
Rated Input Voltage	600 V @380 Vac / 400 Vac; 720 V @480 Vac
Number of MPP trackers	6
Max. input number per MPP tracker	2

Output	
Rated AC Active Power	60,000 W
Max. AC Apparent Power	66,000 VA
Max. AC Active Power (cosφ=1)	66,000 W
Rated Output Voltage	220 V / 380 V, 230 V / 400 V, default 3W + N + PE; 3W + PE optional in settings; 277 V / 480 V, 3W + PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Rated Output Current	91.2 A @380 V, 86.7 A @400 V, 72.2 A @480 V
Max. Output Current	100 A @380 V, 95.3 A @400 V, 79.4 A @480 V
Adjustable Power Factor Range	0.8 leading... 0.8 lagging
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
DC Insulation Resistance Detection	Yes
Residual Current Monitoring Unit	Yes

Communication	
Display	LED indicators; WLAN adaptor + FusionSolar APP
RS485	Yes
USB	Yes
Monitoring BUS (MBUS)	Yes (isolation transformer required)
Smart Dongle-4G	4G / 3G / 2G via Smart Dongle – 4G (Optional)

General Data	
Dimensions (W x H x D)	1,075 x 555 x 300 mm (42.3 x 21.9 x 11.8 inch)
Weight (with mounting plate)	74 kg (163.1 lb.)
Operating Temperature Range	-25°C ~ 60°C (-13°F ~ 140°F)
Cooling Method	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 + Terminal Clamp
Protection Degree	IP65
Topology	Transformerless
Nighttime Power Consumption	< 2 W

Standard Compliance (more available upon request)	
Certificate	EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 60068, IEC 61683
Grid Connection Standards	IEC 61727, VDE-AR-N4105, VDE 0126-1-1, BDEW, VDE 4120, UTE C 15-712-1, CEI 0-16, CEI 0-21, RD 661, RD 1699, P.O. 12.3, RD 413, EN-50438-Turkey, EN-50438-Ireland, C10/11

¹ The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.
² Any DC input voltage beyond the operating voltage range may result in inverter improper operating.



Product Service

Compliance Document

No. D 18 03 41829 03120

Holder of Certificate: **Huawei Technologies Co., Ltd.**

Administration Building
 Headquarters of Huawei Technologies Co., Ltd.
 Bantian, Longgang District
 518129 Shenzhen
 PEOPLE'S REPUBLIC OF CHINA

Product: **Converter**
SOLAR INVERTER

This Compliance document confirms the compliance with the listed standards on a voluntary basis. It refers only to the sample submitted for testing and certification and does not certify the quality or safety of the serial products. See also notes overleaf.

Test report no.: 64290180134001



Date, 2018-04-03


 (Zhengdong Ma)

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Product Service

Compliance Document
No. D 18 03 41829 03120

Model(s): **SUN2000-60KTL-M0**

Parameters:

d.c. Max. Input Voltage:	1100 Vd.c.
d.c. MPP Range:	200-1000 Vd.c.
d.c. Max. Input Current:	22 A /22 A /22 A /22 A / 22 A /22 A
Isc PV:	30 A /30 A /30 A /30 A / 30 A /30 A
a.c. Output Nominal Voltage:	3/N/PE~, 400V 3~, 480V (optional)
a.c. Nominal Operating Frequency:	50 Hz
a.c. Output Max. Current:	95,3 A (@rated voltage 400V) 79,4 A (@rated voltage 480V)
a.c. Output Rated Power:	60 kW
a.c. Output Max. Apparent Power:	66 kVA
Power Factor(adj.):	0,8(lagging)...0,8(leading)
Firmware Version:	V300R001
Operating Temperature Range:	-25°C... + 60°C
Protective Class:	I
Ingress Protection:	IP65

Tested according to: CEI 0-21:2016
 CEI 0-21/V1:2017