

SUN2000-50K-MGL0*

Smart PV Controller



Arc Fault Protection



PV Ground-Fault Protection



PID Recovery



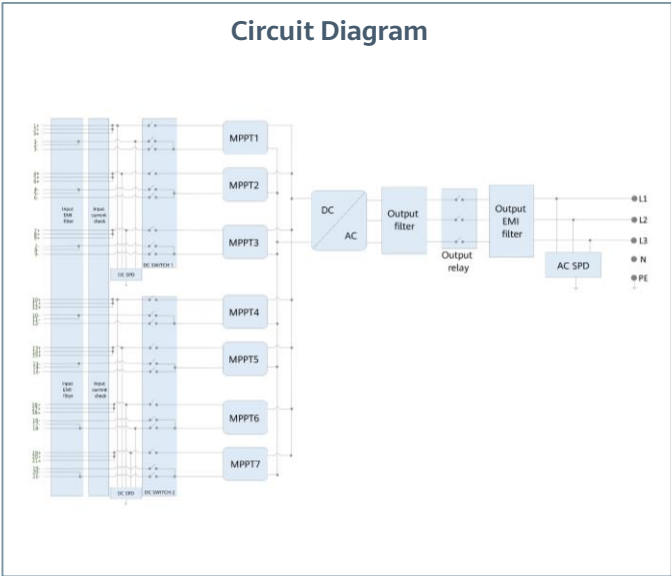
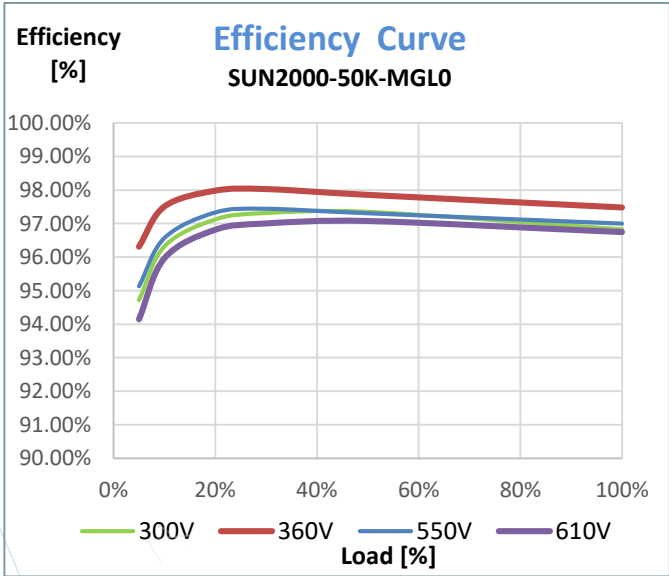
Smart String Level Disconnect



Smart Connector Temperature Detection



MBUS



*Note: The Datasheet only for Mexico

Technical Specification

SUN2000-50K-MGL0

Efficiency

Max. efficiency	97.6%
European efficiency	97.1%

Input

Max. Input Voltage ¹	750 V
Max. Current per MPPT	48A
Max. Short Circuit Current per MPPT	66A
Start Voltage	160 V
MPPT Operating Voltage Range ²	160 V ~ 750 V
Number of MPP trackers	7
Max. input number per MPP tracker	3

Output

Nominal AC Active Power	50,000 W
Max. AC Apparent Power	55,000 VA
Max. AC Active Power (cosφ=1)	55,000 W
Nominal Output Voltage	127Vac 220Vac, 3W/N+PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	131.2A
Max. Output Current	145.8A
Adjustable Power Factor Range	0.8 leading... 0.8 lagging
alternating current THDi	<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
Smart String Level Disconnect	Yes
Arc Fault Protection	Yes
Terminal Temperature Detection	Yes
PID Recovery	Yes
PV Ground-Fault Protection	Yes

Communication

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

General Data

Dimensions (W x H x D)	1,000 x 710 x 395 mm
Weight (with mounting plate)	98 kg
Operating Temperature Range	-25°C ~ 60°C
Cooling Method	Smart Air Cooling
Max. Operating Altitude	4,000 m (13,123 ft.)
Relative Humidity	0 ~ 100%
DC Connector	Amphenol HH4
AC Connector	Waterproof Connector + OT/DT Terminal
Protection Degree	IP66
Topology	Transformerless

Standard Compliance (more available upon request)

Certificate	EN 62109-1/-2, IEC 62109-1/-2, IEC 62116, IEC 61727, IEC 60068, IEC 61683
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^{*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.