SUN2000-80K-MGL0

Smart PV Controller



Arc Fault Protection

PV Ground-Fault Protection

PID Recovery

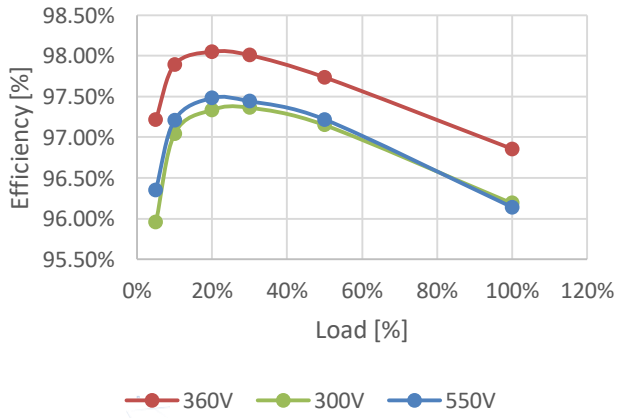
Smart String Level Disconnector

Smart Connector Temperature Detection

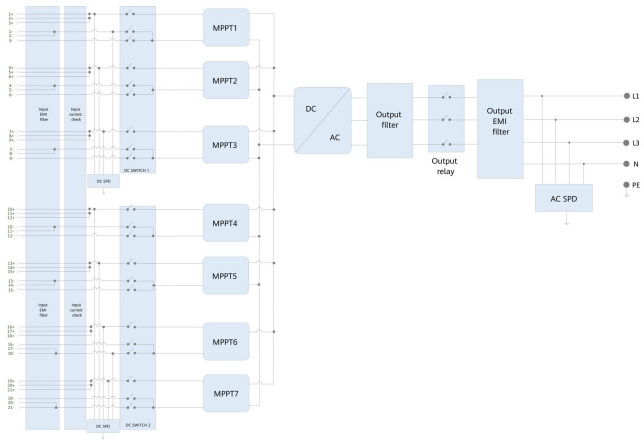
IP66 Protection

Efficiency Curve

SUN2000-80K-MGL0



Circuit Diagram



Technical Specification

Technical Specification	SUN2000-80K-MGL0
Efficiency	
Max. efficiency	98% @ 220V
European efficiency	97.5%
Input	
Max. Input Voltage [1]	750 V
Max. Current per MPPT	48 A
Max. Short Circuit Current per MPPT	66 A
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	80,000 W
Max. AC Apparent Power	88,000 VA
Max. AC Active Power (cosϕ=1)	88,000 W
Nominal Output Voltage	220Vac, 3W/N+PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	210.0 A
Max. Output Current	231.0 A
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 Disconnector	Yes
Arc Fault Protection	Yes
Terminal Temperature Detection	Yes
PID Recovery	Yes
PV Ground-Fault Protection	Yes
Communication	
Display	LED indicators; WLAN adapter + FusionSolar APP
RS485	Yes
USB	Yes
Smart Dongle	Smart Dongle – 4G / WLAN (Optional)
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

*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.