

Smart Energy Controller

SUN2000-150K-MG0



Arc Fault Protection



PV Ground-Fault Protection



DC Surge protection
Type I + Type II



Smart String Level
Disconnect

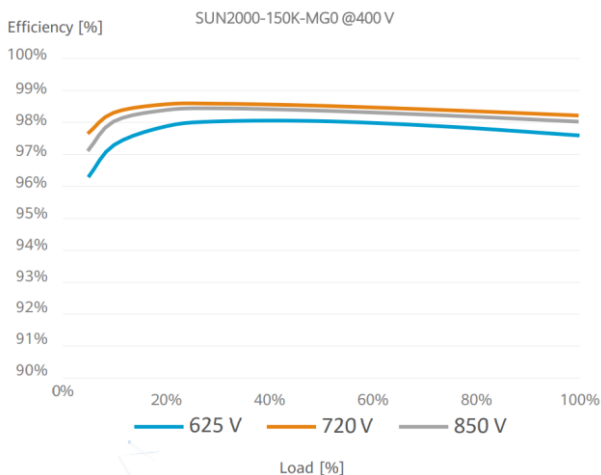


Smart Connector
Temperature Detector

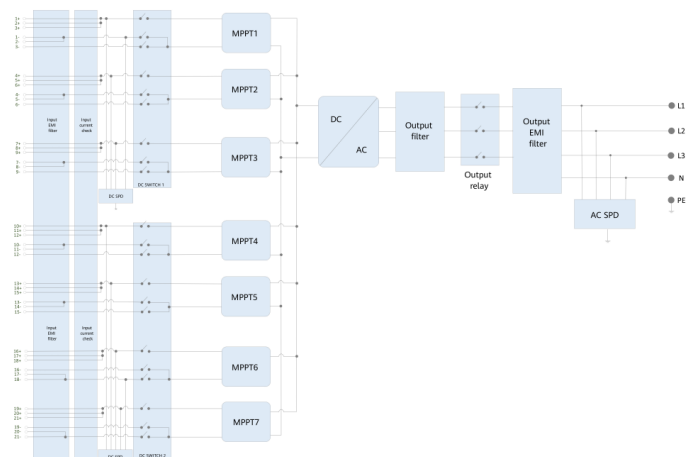


PID Recovery

Efficiency Curve



Circuit Diagram



SUN2000-150K-MGO

Technical Specification

SUN2000	-150K-MGO
	Efficiency
Max. efficiency	98.6% @400 V
European efficiency	98.4% @400 V
	Input
Max. Input Voltage ¹	1100 V
Max. Current per MPPT	48 A
Max. Current per Input	23 A
Max. Short Circuit Current per MPPT	66 A
Start Voltage	200 V
MPPT Operating Voltage Range ²	200 V - 1000 V
Number of MPP trackers	7
Max. input number per MPP tracker	3
	Output
Nominal AC Active Power	150000 W
Max. AC Apparent Power	165000 VA
Max. AC Active Power (cosφ=1)	165000 W
Nominal Output Voltage	400 V, 3W+(N)+PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	216.5.0 A @400 V
Max. Output Current	240.5 A @400 V
Adjustable Power Factor Range	0.8 leading... 0.8 lagging
alternating current THDi	< 1%
	Protection
Anti-islanding Protection	Yes
AC Overcurrent Protection	Yes
DC Reverse-polarity Protection	Yes
PV-array String Fault Monitoring	Yes
AC Surge Arrester	Type II
DC Insulation Resistance Detection	Yes
Residual Current Monitoring Unit	Yes
Smart String Level Disconnecter	Yes
Arc Fault Protection	Yes
Terminal Temperature Detection	Yes
PID Recovery	Yes
PV Ground-Fault Protection	Yes
DC Surge protection ³	Type I + II
	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)	1000 x 710 x 395 mm
Weight (with mounting plate)	≤ 99kg
Operating Temperature Range	-25°C to 60°C
Cooling Method	Smart Air Cooling
Max. Operating Altitude	4000 m
Relative Humidity	0 - 100%
DC Connector	Amphenol Helios H4
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
Grid Connection Standards	VDE-AR-N4105, EN 50549-1, EN 50549-2, RD 661, RD 1699, 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.

*3. SPD Type I+II for inverters with a manufacturing date after 09/01/2024, see self-declaration for more details

Disclaimer: the preceding values are measured by an internal laboratory of Huawei in a specific environment. The actual values may vary with products, software versions, usage conditions, and environmental factors.