

SUN2000-50KTL-M3 Smart PV Controller



Higher Yields

Upto 30% More Energy
with Optimizer



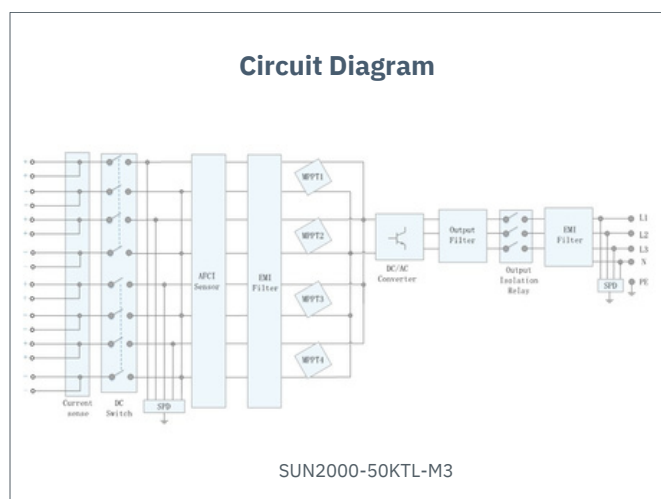
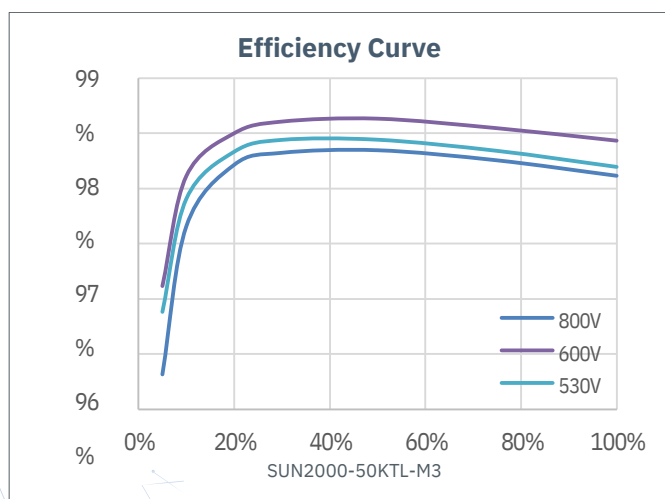
Active Safety

AI Powered
Active Arcing Protection



Flexible Communication

WLAN, Fast Ethernet, 4G
Communication Supported



SUN2000-50KTL-M3

Technical Specification

Technical Specification		SUN2000-50KTL-M3
Efficiency		
Max.Efficiency		98.5
EuropeanEfficiency		%
		98.0
Input		
Max.InputVoltage1		1,100V
Max. Current perMPPT		30A
Max. Current perInput		20 A
Max. Short Circuit Current perMPPT		40A
StartVoltage		200V
MPPTOperatingVoltageRange2		200 V ~ 1,000V
Rated InputVoltage		600V
Number ofInputs		8
Number of MPPTTrackers		4
Output		
Rated AC ActivePower		50,000W
Max. AC ApparentPower		55,000VA
Max. AC Active Power(cosφ=1)		55,000W
Rated OutputVoltage		400 Vac/ 480 Vac, 3W+(N) + PE
Rated AC GridFrequency		50 Hz / 60Hz
Rated OutputCurrent		72.2 A @ 400Vac, 60.1 A @
Max. OutputCurrent		480Vac 79.8 A @ 400Vac, 66.5 A
Adjustable Power FactorRange		@ 480Vac
Max. Total HarmonicDistortion		0.8 LG ... 0.8LD
		<3%
Protection		
Input-side DisconnectionDevice		Yes
Anti-islandingProtection		Yes
AC OvercurrentProtection		Yes
DC Reverse-polarityProtection PV-		Yes
array String FaultMonitoring DC		Yes
SurgeArrester		TypeII
AC SurgeArrester		TypeII
DC Insulation ResistanceDetection		Yes
Residual Current MonitoringUnit		Yes
ArcFaultProtection		Yes
Ripple ReceiverControl		Yes
Integrated PIDRecovery3		Yes
Communication		
Display		LED Indicators, Bluetooth + APP
RS485		Yes
SmartDongle		WLAN/EthernetviaSmartDongle-WLAN-FE(Optional)
		4G/3G/2GviaSmartDongle-4G(Optional)
Monitoring BUS(MBUS)		Yes(IsolationTransformerrequired)
Optimizer Compatibility		
DC MBUSCompatible Optimizer		MERC-1100/1300W-P
General Data		
Dimensions (W x H xD)		640 x 530 x 270 mm (25.2 x 20.9 x 10.6 inch)
Weight (with mountingplate)		49 kg (108.1 lb)
Operating TemperatureRange		-25°C ~ 60°C (-13°F ~ 140°F)
CoolingMethod		Smart Air Cooling
Max. OperatingAltitude		4,000 m (13,123 ft.)
RelativeHumidity		0% RH ~ 100% RH
DCConnector		Amphenol HH4
AC Connector		Waterproof Connector + OT/DT Terminal
ProtectionDegree		IP 66
Topology		Transformerless
Nighttime PowerConsumption		≤ 5.5W
Standard Compliance (more available upon request)		
Safety		EN62109-1/-2,IEC62109-1/-2,EN50530,IEC62116,IEC60068,IEC61683
GridConnectionStandards		IEC 61727,VDE-AR-N4105,VDE0126-1-1,BDEW,G59/3,UTEC15-712-1,CEIO-16,CEIO-21,RD661,RD1699, P.O.12.3,RD413,EN-50438-Turkey,EN-50438-Ireland,C10/11,MEA,ResolutionNo.7, NRS097-2-1,DEWA

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. SUN2000-30~50KTL-M3 raises potential between PV-and-ground to above zero through integrated PID recovery function to recover module degradation from PID. Supported module types include: P-type (mono, poly), N-type (nPERT, HIT)