

SMART ENERGY CONTROLLER

SUN2000-8/10K-LC0



Active Safety
Active Arcing Protection



Higher Yields
Up to 30% More Energy
with Optimizer



Battery Ready
Plug & Play, Whole-house
power backup

SUN2000-8/10K-LC0 Technical Specification

Technical Specification		SUN2000-8K-LC0	SUN2000-10K-LC0
Efficiency			
Max. efficiency			98.1%
European weighted efficiency			97.5%
Input (PV)			
Recommended max. PV power ¹	12,000 Wp	15,000 Wp	
Max. input voltage			600 V
Startup voltage			50 V
MPPT operating voltage range			40 ~ 560 V
Rated input voltage			360 V
Max. input current per MPPT			16 A
Max. short-circuit current			20 A
Max. number of inputs			3
Number of MPP trackers			3
Input (DC Battery)			
Compatible battery			LUNA2000-5/10/15-S0
Operating voltage range			350 ~ 560 Vdc
Max. operating current			25 A
Max. charge power	8,000 W	10,000 W	
Max. discharge power	8,000 W	10,000 W	
Output (On Grid)			
Grid connection			Single-phase
Rated output power	8,000 W	10,000 W	
Max. apparent power	8,800 VA	10,000 VA	
Rated output voltage			220 Vac / 230 Vac / 240 Vac, L / N + PE
Max. output current	40.0 A	45.5 A	
Rated AC grid frequency			50 Hz/60 Hz
Adjustable power factor			0.8 leading ... 0.8 lagging
Max. total harmonic distortion			≤ 3%
Backup power output			Yes (via SmartGuard-63A-S0)
Features & Protection			
Anti-islanding protection			Yes
DC reverse polarity protection			Yes
Insulation monitoring			Yes
DC surge protection			Yes, compatible with TYPE II protection class according to EN/IEC 61643-11
AC surge protection			Yes, compatible with TYPE II protection class according to EN/IEC 61643-11
Residual current monitoring unit			Yes
AC overcurrent protection			Yes
AC short-circuit protection			Yes
AC overvoltage protection			Yes
Over-heat protection			Yes
Arc fault protection			Yes
Battery charging from grid			Yes
General Data			
Operating temperature range			-25°C to +60°C (-13 °F ~ 140 °F)
Relative operating humidity			0%-100% RH
Operating altitude			0-4,000 m (Derating above 2,000 m)
Cooling	Natural convection	Smart Air Cooling	
Display			LED indicators; integrated WLAN + FusionSolar app
Communication			RS485, WLAN / Ethernet via Smart Dongle-WLAN-FE (Optional) 4G / 3G / 2G via Smart Dongle-4G (Optional), EMMA
Weight	14.5 kg	15 kg	
Dimensions (W x H x D) (incl. mounting plate)			425 mm x 376.5 mm x 150 mm
Degree of protection			IP66
Optimizer Compatibility			
Compatible optimizer			SUN2000-450W-P2, SUN2000-600W-P
Standards Compliance (More Available Upon Request)			
Certificates			IEC62109-1, IEC62109-2, EN 61000-6 series , EN 62920 EMC, EN 55011 EMC, ETSI EN 301-489-1 EMC, ETSI EN 301-489-17 EMC, EN 61000 3-11, EN 61000 3-12, IEC61000 2-2
Grid connection standards			ABNT16149/16150:2013, NRS 097-2-1, PEA, MEA

*1.The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.

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.