

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.