

SUN2000-8/10K-LC0

Smart Energy Controller

Technical Specification	SUN2000-8K-LC0	SUN2000-10K-LC0
Efficiency		
Max. efficiency	98.1%	
European weighted efficiency	97.5%	
Input		
Recommended max. PV power	12,000 Wp	15,000 Wp
Max. input voltage	600 V	
Max. input current per MPPT	15 A / 15 A / 15 A	
Max. short-circuit current	20 A	
Start-up voltage	50 V	
MPPT operating voltage range	40 V ~ 560 V	
Full-load MPPT voltage range	260 V ~ 510 V 260 V ~ 480 V (@ 40 ° C)	285 V ~ 510 V 285 V ~ 480 V (@ 40 ° C)
Rated input voltage	360 V	
Max. number of inputs	3	
Number of MPP trackers	3	
Output		
Rated output power	8,000 W	10,000 W
Max. apparent power	8,800 VA	10,000 VA
Max. active power (cosφ=1)	8,800 W	10,000 W
Rated output voltage	220 Vac / 230 Vac / 240 Vac, L/N + PE	
Rated output current	36.4 A / 220 Vac	45.5 A / 220 Vac
	34.8 A / 230 Vac	43.5 A / 230 Vac
	33.3 A / 240 Vac	41.7 A / 240 Vac
	40.0 A / 220 Vac	45.5A/220Vac
Max. output current	38.3 A / 230 Vac	43.5A/230Vac
	36.7 A / 240 Vac	41.7A/240Vac
	Rated AC grid frequency	
Adjustable power factor	50 Hz / 60 Hz	
Max. total harmonic distortion	0.8 leading ... 0.8 lagging	
	< 3 %	
Features & Protection		
Overvoltage Category	PV II / AC III	
Input-side disconnection device	Yes	
Anti-islanding protection	Yes	
AC over-current protection	Yes	
DC reverse-polarity protection	Yes	
String fault detection	Yes	
DC surge protection	TYPE II	
AC surge protection	CLASS II	
Insulation impedance detection	Yes	
Arc Fault Protection	Yes	
Residual current monitoring unit (RCMU)	Yes	
Communication		
Display	LED Indicators, Integrated WLAN + FusionSolar APP	
RS485	Yes	
Smart Dongle	WLAN / Ethernet via Smart Dongle-WLAN-FE (Optional) 4G / 3G / 2G via Smart Dongle-4G (Optional)	
Monitoring BUS (MBUS)	Yes	
General Data		
Operation temperature range	-25 ° C ~ +60 °C (-13 °F ~ 140 °F)	
Relative humidity	0 % RH ~ 100% RH	
Max. operating altitude	4,000 m (13,123 ft.) (Derating above 2000 m)	
Cooling	Natural Convection	Regulated Air Cooling
Weight	≤16 kg (35.3 lb)	
Dimensions (W x H x D) (incl. mounting plate)	425 * 365 * 150 mm (16.7 * 14.4 * 5.9 inch)	
Nosie Level	< 29 dB (typical working condition)	< 40 dB (typical working condition); < 45 dB Max
Degree of protection	IP66	
Optimizer Compatibility		
DC MBUS compatible optimizer	SUN2000-450W-P, SUN2000-450W-P2, SUN2000-600W-P	
Standard Compliance (more available upon request)		
Safety	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	
Grid connection standards	G99, ABNT16149/16150: 2013, IEEE1547, DEWA-2016, NRS 097-2-1, EN 50549-1, UNE217002, NTS631 (Type A) , UNE 217001 / RD244 (annex I), TOR E, ÖNORM E 8001-4-712, VDE-AR-N-4105:2011, DIN VDE 0126-1-1:2006, G99/1-3: 2018, NB/T 32004-2018, PEA, MEA, Philippine Grid Code Resolution No. 07 ,IEC 61727:2004-12, IEC 61000-2-2, IEC 62116: 2014,IEC62109-1, IEC62109-2, IEC61683, IEC60068-2 series	

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.