



Active Safety

AI Powered
Active Arcing Protection



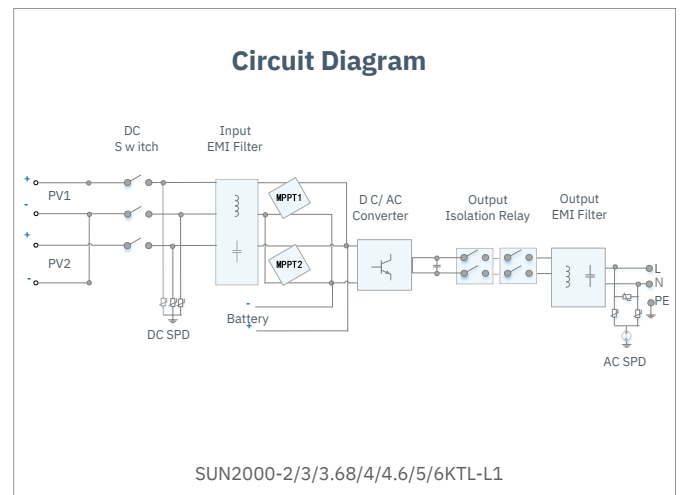
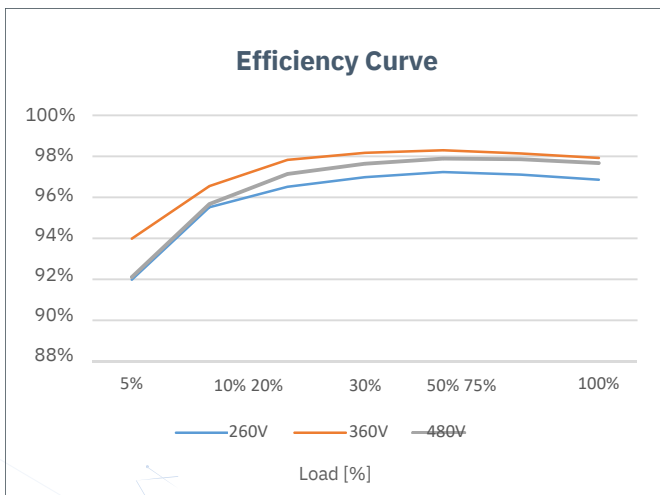
Higher Yields

Up to 30% More
Energy with Optimizer



2x POWER Battery Ready

5KW AC Output plus
5KW Battery Charge



Technical Specification

Technical Specification	S UN2000 -2KTL-L1	S UN2000 -3KTL-L1	S UN2000 -3.68KTL-L1	S UN2000 -4KTL-L1	S UN2000 -4.6KTL-L1	S UN2000 -5KTL-L1	S UN2000 -6KTL-L11
Efficiency							
Max. efficiency	98.2 %	98.3 %	98.4 %	98.4 %	98.4 %	98.4 %	98.4 %
European weighted efficiency	96.7 %	97.3 %	97.3 %	97.5 %	97.7 %	97.8 %	97.8 %
Input (PV)							
Recommended max. PV power 2	3,000 Wp	4,500 Wp	5,520 Wp	6,000 Wp	6,900 Wp	7,500 Wp	9,000 Wp
Max. input voltage				600 V 3			
Start-up voltage				100 V			
MPPT operating voltage range				90 V – 560 V 3			
Rated input voltage				360 V			
Max. input current per MPPT				12.5 A			
Max. short-circuit current				18 A			
Number of MPP trackers				2			
Max. number of inputs				2			
Input (DC Battery)							
Compatible Battery				LG Chem RESU 7H_R / 10H_R			
Operating voltage range				350 ~ 450 Vdc			
Max operating current				10 A @7H_R / 15 A @10H_R			
Max charge power				3,500 W @7H_R / 5,000 W @10H_R			
Max discharge Power @7H_R	2,200 W	3,300 W		3,500 W 3,500 W 3,500 W		3,500 W	3,500 W
Max discharge Power @10H_R	2,200 W	3,300 W		3,680 W 4,400 W 4,600 W		5,000 W	5,000 W
Compatible Battery				HUAWEI Smart ESS Battery 5kWh – 30kWh 1			
Operating voltage range				350 ~ 560 Vdc			
Max operating current				15 A			
Max charge Power				5,000 W 4			
Max discharge Power	2,200 W	3,300 W		3,680 W 4,400 W 4,600 W		5,000 W	5,000 W
Output							
Grid connection				Single phase			
Rated output power	2,000 W	3,000 W		3,680 W 4,000 W 4,600 W 3,680 VA 4,400 VA		5,000 W 5	6,000 W
Max. apparent power	2,200 VA	3,300 VA		5,000 VA 6		5,500 VA	6,000 VA
Rated output voltage				220 Vac/ 230 Vac/ 240 Vac		7	
Rated AC grid frequency				50 Hz / 60 Hz			
Max. output current	10 A	15 A		16 A 20 A 23A 8		25 A 8	27.3 A
Adjustable power factor				0.8 leading ... 0.8 lagging			
Max. total harmonic distortion				≤ 3 %			
Backup power output				Yes (via Backup Box-B0 1)			
Protection & Feature							
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				Yes			
AC overcurrent protection				Yes			
AC short-circuit protection				Yes			
AC overvoltage protection				Yes			
Over-heat protection				Yes			
Arc fault protection				Yes			
Battery reverse charging from grid				Yes			
General Data							
Operating temperature range				° -25 ~ +60 C			
Relative operating humidity				0 %RH ~ 100%RH			
Operating altitude				0 ~ 4,000 m (Derating above 2,000 m)			
Cooling				Natural convection			
Disp lay				LED indicators; integrated WLAN + FusionSolarAPP			
Communication				RS485, WLAN via inverter built-in WLAN module			
Weight (incl. mounting bracket)				Ethernet via Smart Dongle-WLAN-FE (Optional); 4G / 3G / 2G via Smart Dongle-4G (Optional)			
Dimension (incl. mounting bracket)				12.0 kg (26.5 lb)			
Degree of protection				365mm * 365mm * 156 mm (14.4 x 14.4 x 6.1 inch)			
Nighttime Power Consumption				IP65			
				< 2.5 W			
Optimizer Compatibility							
DC MBUS compatible optimizer				SUN2000-450W-P			
Standard Compliance (more available upon request)							
Safety				EN/IEC 62109-1, EN/IEC 62109-2			
Grid connection standards				G98, G99, EN 50549-1, CEI 0-21, VDE-AR-N-4105, AS 4777.2, C10/11, ABNT, UTE C15-712, RD 1699, TOR D4, IEC61727, IEC62116			

*1 Available in 2020 Q3.

*2 Inverter max input PV power is 10,000 Wp when long strings are designed and fully connected with SUN2000-450W-P power optimizers.

*3 The maximum input voltage and operating voltage upper limit will be reduced to 495 V when inverter connects and works with LGBattery. *4

2,500 W @ 5kWh HUAWEI ESS battery

*5 AS4777.2: 4,991W. *6. VDE-AR-N 4105: 4,600VA / AS4777.2: 4,999VA. *7. AS4777.2: 4,999VA / C10/11: 5,000VA *8. AS4777.2: 21.7A.