



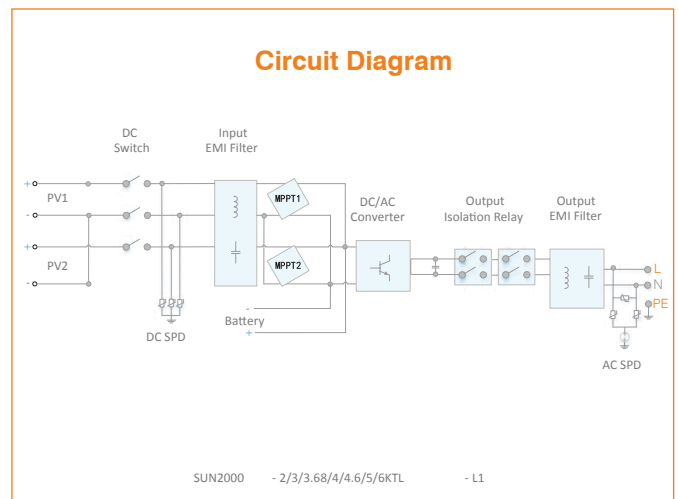
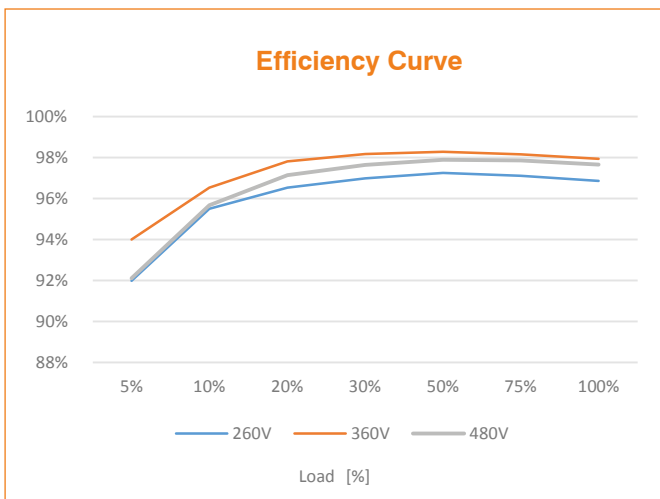
**Active Safety**  
AI Powered  
Active Arcing Protection



**Higher Yields**  
Up to 30% More  
Energy with Optimizer



**2x POWER Battery Ready**  
5KW AC Output plus  
5KW Battery Charge



Technical Specification	SUN2000 -2KTL-L1	SUN2000 -3KTL-L1	SUN2000 -3.68KTL-L1	SUN2000 -4KTL-L1	SUN2000 -4.6KTL-L1	SUN2000 -5KTL-L1	SUN2000 -6KTL-L1
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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 <sup>1</sup>	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 <sup>2</sup>						
Start-up voltage	100 V						
MPPT operating voltage range	90 V – 560 V <sup>2</sup>						
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. input number per MPP tracker	1						

# SUN2000-2/3/3.68/4/4.6/5/6KTL-L1

## Technical Specification

### 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						
Operating voltage range	350 ~ 560 Vdc						
Max operating current	15 A						
Max charge Power	5,000 W <sup>3</sup>						
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 ( On Grid )

Grid connection	Single phase						
Rated output power	2,000 W	3,000 W	3,680 W	4,000 W	4,600 W	5,000 W <sup>4</sup>	6,000 W
Max. apparent power	2,200 VA	3,300 VA	3,680 VA	4,400 VA	5,000 VA <sup>5</sup>	5,500 VA <sup>6</sup>	6,000 VA
Rated output voltage	220 Vac / 230 Vac / 240 Vac						
Rated AC grid frequency	50 Hz / 60 Hz						
Max. output current	10 A	15 A	16 A	20 A	23 A <sup>7</sup>	25 A <sup>7</sup>	27.3 A
Adjustable power factor	0.8 leading ... 0.8 lagging						
Max. total harmonic distortion	≤ 3 %						

### Output ( Backup Power via Backup Box -B0 )

Maximum apparent power	5,000 VA
Rated output voltage	220 V / 230 V
Maximum output current	22.7 A
Power factor range	0.8 leading ... 0.8 lagging

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### Protection & Feature

Anti-islanding protection, DC reverse polarity protection, Insulation monitoring, Residual current monitoring, AC overcurrent protection, AC short-circuit protection, AC overvoltage protection, Over-heat protection, Arc fault protection, Battery reverse charging from grid, Yes

DC surge protection  
AC surge protection

Yes, compatible with TYPE II protection class according to EN/IEC 61643 -11

### 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
Display	LED indicators; integrated WLAN + FusionSolar APP
Communication	RS485, WLAN via inverter built-in WLAN module. Ethernet via Smart Dongle -WLAN-FE (Optional); 4G / 3G / 2G via Smart Dongle-4G (Optional)
Weight (incl. mounting bracket)	12.0 kg (26.5 lb)
Dimension (incl. mounting bracket)	365mm * 365mm * 156 mm (14.4 x 14.4 x 6.1 inch)
Degree of protection	IP65
Nighttime Power Consumption	< 2.5 W

### Optimizer Compatibility

DC MBUS compatible optimizer SUN2000-450W -P

### Standart Uyumluluğu ( Talep Üzerine Daha Fazlası Sunulabilir )

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

