



Active Safety

AI Powered
Active Arcing Protection



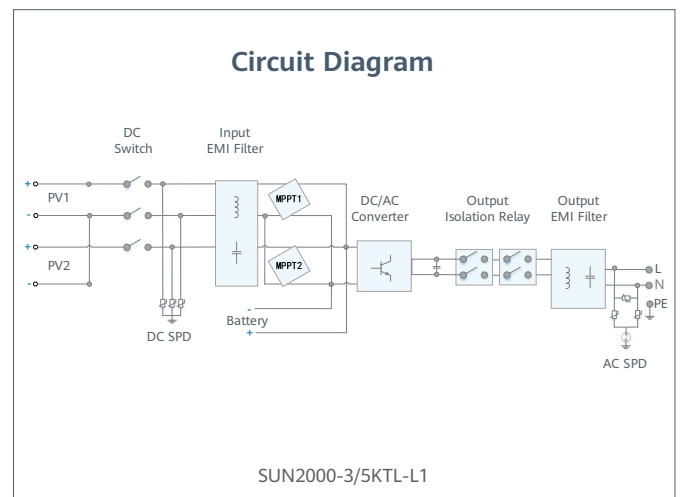
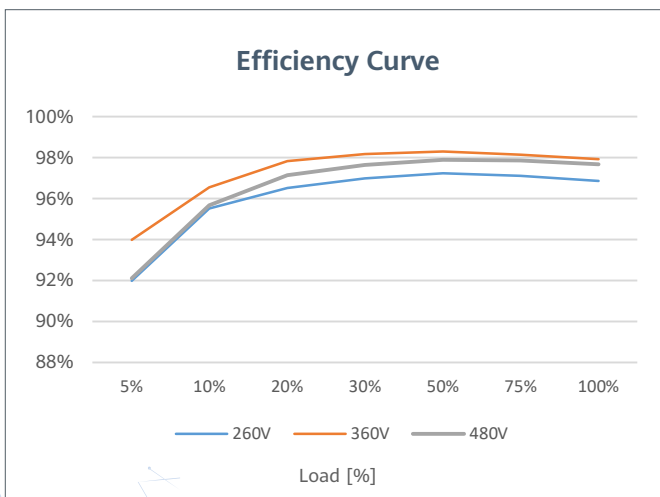
Higher Yields

Up to 30% More
Energy with Optimizer



2x POWER Battery Ready

5KW AC Output plus
5KW Battery Charge



SUN2000-3/5KTL-L1
Technical Specification

| Technical Specification | SUN2000 -3KTL-L1 | SUN2000 -5KTL-L1 |
|--|--|---------------------------|
| Efficiency | | |
| Max. efficiency | 98.3 % | 98.4 % |
| European weighted efficiency | 97.3 % | 97.8 % |
| Input (PV) | | |
| Recommended max. PV power ² | 4,500 Wp | 7,500 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 | 3,300 W | 3,500 W |
| Max discharge Power @10H_R | 3,300 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 | 3,300 W | 5,000 W |
| Output | | |
| Grid connection | Single phase | |
| Rated output power | 3,000 W | 5,000 W ⁵ |
| Max. apparent power | 3,300 VA | 5,500 VA ⁷ |
| Rated output voltage | 220 Vac / 230 Vac / 240 Vac | |
| Rated AC grid frequency | 50 Hz / 60 Hz | |
| Max. output current | 15 A | 25 A ⁸ |
| 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 (Derating above 45°C @ Rated output power) | |
| 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 | |
| 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, 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 LG battery.

^{*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.