Smart Energy Center

Higher Revenue
Max. efficiency 98.6%

Simple & Easy
Optimized AC connector

Battery Ready
Plug & Play battery interface

Safe & Reliable
DC & AC surge protection

Efficiency Curve

- 260V
- 380V
- 480V

Load [%]

Efficiency [%]

0% 20% 40% 60% 80% 100%

Circuit Diagram

SUN2000L-2/3/3.6/4/4.6/5KTL
## Technical Specification

### SUN2000L-2KTL

#### Efficiency
- Max. efficiency: 98.4%
- European weighted efficiency: 97.0%

#### Input
- Recommended max. PV power: 3,000 Wp
- Max. input voltage: 380 V
- Max. input current per MPPT: 11 A
- Max. number of inputs: 2

#### Output
- Grid connection: Single phase
-Rated output power: 2,000 W
- Max. apparent power: 2,200 VA
- Rated output voltage: 220 V
- Rated AC grid frequency: 50 Hz
- Adjustable power factor: 0.8 leading ... 0.8 lagging
- Max. total harmonic distortion: ≤ 3 %

#### Protection
- Anti-Islanding protection: Yes
- DC reverse polarity protection: Yes
- Insulation monitoring: Yes
- AC surge protection: Yes
- Residual current monitoring: Yes
- AC overcurrent protection: Yes
- AC short-circuit protection: Yes
- AC overvoltage protection: Yes
- Over-heat protection: Yes

#### General Data
- Operating temperature range: -30 ~ +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
- Communication: RS485, WLAN
- Weight (incl. mounting bracket): 10.6 kg (23.4 lb)
- Dimension (incl. mounting bracket): 375 x 375 x 161.5 mm (14.8 x 14.8 x 6.4 inch)
- Degree of protection: IP65
- Nighttime Power Consumption: < 2 W

### Battery Compatibility
- Battery: LG Chem RESU 7H_R / 10H_R
- Voltage range: 350 ~ 450 Vdc
- Max. current: 10 A

### Optimizer Compatibility
- DC MBUS compatible optimizer: SUN2000P-375W via Smart PV Safety Box SmartPSB2000L

### Standard Compliance (more available upon request)
- Safety: EN/IEC 62109-1, EN/IEC 62109-2

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*1. Only applicable for PV string. The maximum input voltage and operating voltage upper limit will be reduced to 495 V when inverter connects and works with LG battery.
*6. Compatible TYPE II protection class according to EN/IEC 61643-11