

# Smart String Inverter



## Higher Revenue

Max. efficiency 98.65%



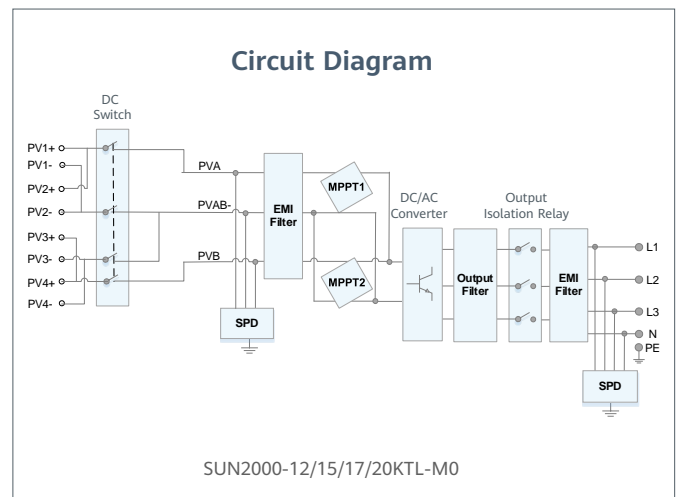
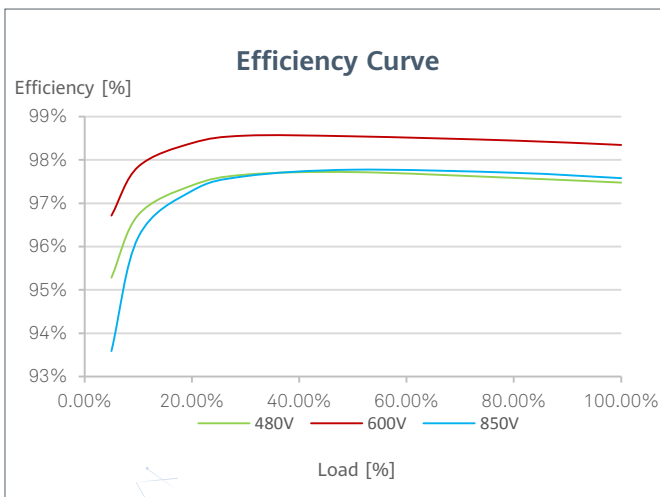
## Simple & Easy

25 kg



## Safe & Reliable

Arc fault protection



# SUN2000-12/15/17/20KTL-M0 Technical Specification

| Technical Specification | SUN2000<br>-12KTL-M0 | SUN2000<br>-15KTL-M0 | SUN2000<br>-17KTL-M0 | SUN2000<br>-20KTL-M0 |
|-------------------------|----------------------|----------------------|----------------------|----------------------|
|-------------------------|----------------------|----------------------|----------------------|----------------------|

## Efficiency

|                              |        |        |        |        |
|------------------------------|--------|--------|--------|--------|
| Max. efficiency              | 98.50% | 98.65% | 98.65% | 98.65% |
| European weighted efficiency | 98.00% | 98.30% | 98.30% | 98.30% |

## Input

|                                      |                   |                   |                   |                   |
|--------------------------------------|-------------------|-------------------|-------------------|-------------------|
| Recommended max. PV power            | 24,000 Wp         | 29,760 Wp         | 29,760 Wp         | 29,760 Wp         |
| Max. input voltage <sup>1</sup>      | 1,080 V           |                   |                   |                   |
| Operating voltage range <sup>2</sup> | 160 V ~ 950 V     |                   |                   |                   |
| Start voltage                        | 200 V             |                   |                   |                   |
| Full power MPPT voltage range        | 380 Vdc ~ 850 Vdc | 380 Vdc ~ 850 Vdc | 400 Vdc ~ 850 Vdc | 480 Vdc ~ 850 Vdc |
| Rated input voltage                  | 600 V             |                   |                   |                   |
| Max. input current per MPPT          | 22 A              |                   |                   |                   |
| Max. short-circuit current           | 30 A              |                   |                   |                   |
| Number of MPP trackers               | 2                 |                   |                   |                   |
| Max. number of inputs                | 4                 |                   |                   |                   |

## Output

|                                |   |           |           |           |
|--------------------------------|---|-----------|-----------|-----------|
| Grid connection                | Three phase                                       |           |           |           |
| Rated output power             | 12,000 W  | 15,000 W  | 17,000 W  | 20,000 W  |
| Max. apparent power            | 13,200 VA   | 16,500 VA | 18,700 VA | 22,000 VA |
| Rated output voltage           | 220 Vac / 380 Vac, 230 Vac / 400 Vac, 3W + N + PE |           |           |           |
| Rated AC grid frequency        | 50 Hz / 60 Hz                                     |           |           |           |
| Max. output current            | 20 A  | 25.2 A    | 28.5 A    | 33.5 A    |
| Adjustable power factor        | 0.8 leading ... 0.8 lagging                       |           |           |           |
| Max. total harmonic distortion | ≤ 3 %   |           |           |           |

## Features & Protections

|                                  |     |
|----------------------------------|-----|
| Input-side disconnection device  | Yes |
| Anti-islanding protection        | Yes |
| AC over-current protection       | Yes |
| AC short-circuit protection      | Yes |
| AC over-voltage protection       | Yes |
| DC reverse-polarity protection   | Yes |
| DC surge protection <sup>3</sup> | Yes |
| AC surge protection <sup>3</sup> | Yes |
| Residual current monitoring unit | Yes |
| Arc fault protection             | Yes |
| Ripple receiver control          | Yes |

## General Data

|  |   |
|--|---|
| Operation temperature range                      | -25 ~ + 60 °C (-13 °F ~ 140 °F) (Derating above 45 °C @ Rated output power)                                       |
| Relative humidity                                | 0 % RH ~ 100% RH  |
| Max. operating altitude                          | 0 - 4,000 m (13,123 ft.) (Derating above 2000 m)  |
| Cooling  | Natural Convection  |
| Display  | LED Indicators  |
| Communication                                    | RS485;<br>WLAN via Smart Dongle-WLAN/WLAN-FE; Ethernet via Smart Dongle-WLAN-FE; 4G / 3G / 2G via Smart Dongle-4G |
| Weight (with mounting plate)                     | 25 kg   |
| Dimensions (W x H x D)<br>(incl. mounting plate) | 525 x 470 x 262 mm (20.7 x 18.5 x 10.3 inch)  |
| Degree of protection                             | IP65  |
| Nighttime Power Consumption                      | < 1 W   |

## Standard Compliance (more available upon request)

|                           |   |
|---------------------------|---|
| Safety                    | EN/IEC 62109-1, EN/IEC 62109-2  |
| Grid connection standards | G98, G99, EN 50438, CEI 0-21, CEI 0-16, VDE-AR-N-4105, VDE-AR-N-4110, AS 4777, C10/11, ABNT, UTE C15-712, RD 1699, RD 661, PO 12.3, TOR D4, NRS 097-2-1, IEC61727, IEC62116, DEWA 2.0 |

<sup>\*1</sup> The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.

<sup>\*2</sup> Any DC input voltage beyond the operating voltage range may result in inverter improper operating.

<sup>\*3</sup> Compatible TYPE II protection class according to EN/IEC 61643-11