

# SUN2000-100KTL-M1

## Smart String Inverter



10  
MPP Trackers



98.8% (@480V)  
Max. Efficiency



String-level  
Management



Smart I-V Curve  
Diagnosis Supported



MBUS  
Supported



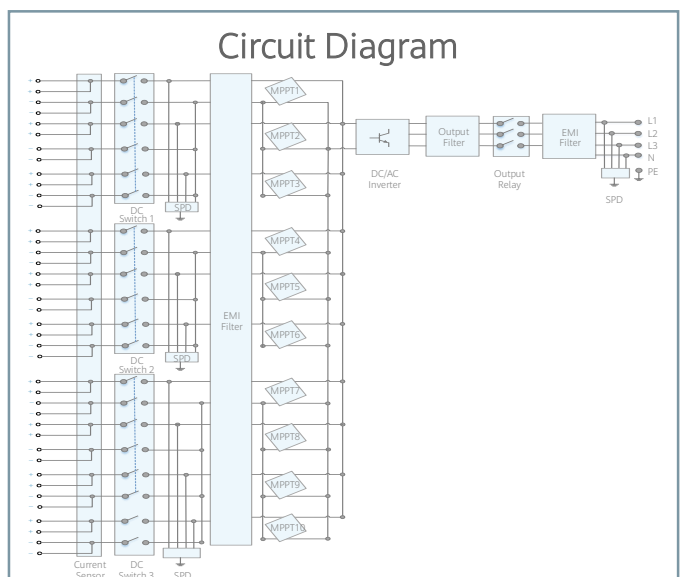
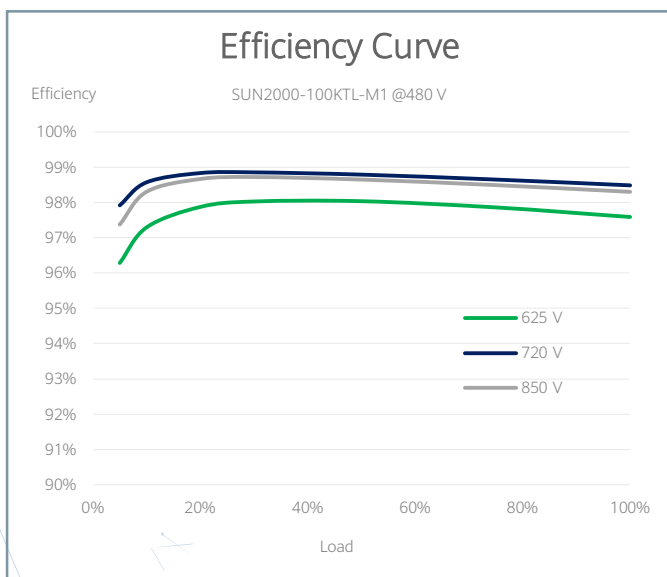
Fuse Free  
Design



AFCI  
Optional



IP66  
Protection



# Technical Specifications

| Efficiency  |   |
|---|---|
| Max. Efficiency                                   | 98.8% @480 V, 98.6% @380 V / 400 V  |
| European Efficiency                               | 98.6% @480 V, 98.4% @380 V / 400 V  |
| Input   |   |
| Max. Input Voltage                                | 1,100 V   |
| Max. Current per MPPT                             | 26 A  |
| Max. Short Circuit Current per MPPT               | 40 A  |
| Start Voltage                                     | 200 V   |
| MPPT Operating Voltage Range                      | 200 V ~ 1,000 V   |
| Nominal Input Voltage                             | 720 V @480 Vac, 600 V @400 Vac, 570 V @380 Vac                                      |
| Number of Inputs                                  | 20  |
| Number of MPP Trackers                            | 10  |
| Output  |   |
| Nominal AC Active Power                           | 100,000 W   |
| Max. AC Apparent Power                            | 110,000 VA  |
| Max. AC Active Power (cosφ=1)                     | 110,000 W   |
| Nominal Output Voltage                            | 480 V/ 400 V/ 380 V, 3W+(N)+PE  |
| Rated AC Grid Frequency                           | 50 Hz / 60 Hz   |
| Nominal Output Current                            | 120.3 A @480 V, 144.4 A @400 V, 152.0 A @380 V                                      |
| Max. Output Current                               | 133.7 A @480 V, 160.4 A @400 V, 168.8 A @380 V                                      |
| Adjustable Power Factor Range                     | 0.8 LG ... 0.8 LD   |
| Max. Total Harmonic Distortion                    | < 3%  |
| Protection  |   |
| Input-side Disconnection Device                   | Yes   |
| Anti-islanding Protection                         | Yes   |
| AC Overcurrent Protection                         | Yes   |
| DC Reverse-polarity Protection                    | Yes   |
| PV-array String Fault Monitoring                  | Yes   |
| DC Surge Protection <sup>1</sup>                  | Yes   |
| AC Surge Protection <sup>1</sup>                  | Yes   |
| DC Insulation Resistance Detection                | Yes   |
| Residual Current Monitoring Unit                  | Yes   |
| Arc Fault Protection                              | Optional  |
| Communication                                     |   |
| Display   | LED Indicators, WLAN + APP  |
| USB   | Yes   |
| MBUS  | Yes (isolation transformer required)  |
| RS485   | Yes   |
| General   |   |
| Dimensions (W x H x D)                            | 1,035 x 700 x 365 mm (40.7 x 27.6 x 14.4 inch)                                      |
| Weight (with mounting plate)                      | 90 kg (198.4 lb.)   |
| Operating Temperature Range                       | -25°C ~ 60°C (-13°F ~ 140°F)  |
| Cooling Method                                    | Smart Air Cooling   |
| Max. Operating Altitude without Derating          | 4,000 m (13,123 ft.)  |
| Relative Humidity                                 | 0 ~ 100%  |
| DC Connector                                      | Staubli MC4   |
| AC Connector                                      | Waterproof Connector + OT/DT Terminal   |
| Protection Degree                                 | IP66  |
| Topology  | Transformerless   |
| Standard Compliance (more available upon request) |   |
| Certificates                                      | EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 61727, IEC 60068, IEC 61683 |

1: Compatible Type II protection class according to IEC / EN 61643-11