

SUN2000-150K-MG0  
Smart PV Controller



Support 2 in 1 Optimizer



Arc Fault Protection



Smart Connector  
Temperature Detector



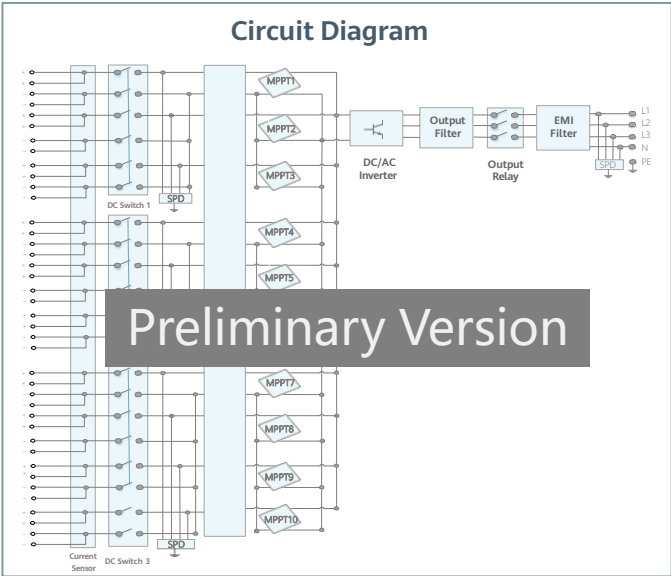
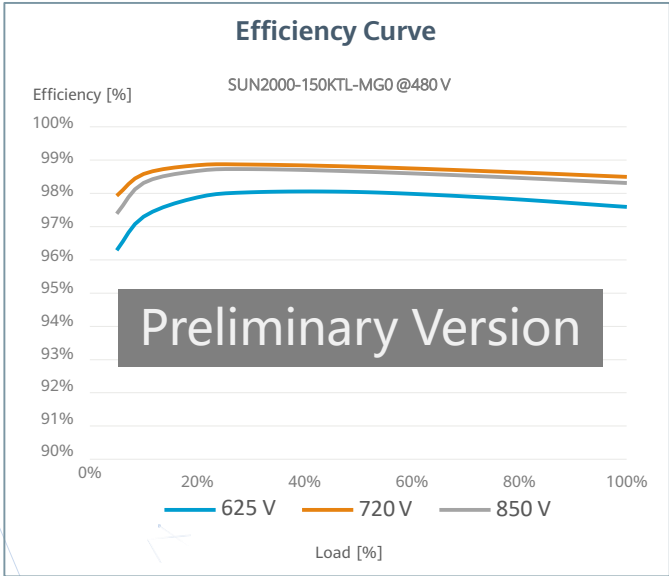
PV Ground-Fault Protection



PID Recovery



SSLD



Technical Specification SUN2000-150K-MG0

| Efficiency          |       |
|---------------------|-------|
| Max. efficiency     | 98.8% |
| European efficiency | -     |

| Input                                     |                 |
|-------------------------------------------|-----------------|
| Max. Input Voltage <sup>1</sup>           | 1,100 V         |
| Max. Current per MPPT                     | 48A             |
| Max. Short Circuit Current per MPPT       | 66A             |
| Start Voltage                             | 200 V           |
| MPPT Operating Voltage Range <sup>2</sup> | 200 V ~ 1,000 V |
| Number of MPP trackers                    | 7               |
| Max. input number per MPP tracker         | 3               |

| Output                        |                                                |
|-------------------------------|------------------------------------------------|
| Nominal AC Active Power       | 150,000 W                                      |
| Max. AC Apparent Power        | 165,000 VA                                     |
| Max. AC Active Power (cosφ=1) | 165,000 W                                      |
| Nominal Output Voltage        | 380 V/400 V/480Vac                             |
| Rated AC Grid Frequency       | 50 Hz / 60 Hz                                  |
| Nominal Output Current        | 227.9 A @380 V, 216.5 A @400 V, 180.4A @480Vac |
| Max. Output Current           | 253.2 A @380 V, 240.5 A @400 V, 200.5A @480Vac |
| Adjustable Power Factor Range | 0.8 leading... 0.8 lagging                     |
| alternating current THDi      | <1%                                            |

| 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 Arrester                  | Type II |
| AC Surge Arrester                  | Type II |
| DC Insulation Resistance Detection | Yes     |
| Residual Current Monitoring Unit   | Yes     |
| Smart String Level Disconnecter    | Yes     |
| Arc Fault Protection               | Yes     |
| Terminal Temperature Detection     | Yes     |
| PID Recovery                       | Yes     |
| More...                            | ...     |

| Communication         |                                                |
|-----------------------|------------------------------------------------|
| Display               | LED indicators; WLAN adaptor + FusionSolar APP |
| RS485                 | Yes                                            |
| USB                   | Yes                                            |
| Smart Dongle-4G       | Smart Dongle – 4G / WLAN (Optional)            |
| Monitoring BUS (MBUS) | Yes (isolation transformer required)           |

| General Data                 |                                       |
|------------------------------|---------------------------------------|
| Dimensions (W x H x D)       | 1,000 x 710 x 395 mm                  |
| Weight (with mounting plate) | 96 kg                                 |
| Operating Temperature Range  | -25°C ~ 60°C                          |
| Cooling Method               | Smart Air Cooling                     |
| Max. Operating Altitude      | 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) |                                                                                     |
|---------------------------------------------------|-------------------------------------------------------------------------------------|
| Certificate                                       | EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 61727, IEC 60068, IEC 61683 |
| Grid Connection Standards                         | VDE-AR-N4105, EN 50549-1, EN 50549-2, RD 661, RD 1699, C10/11                       |

<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.