

# SMART ENERGY CONTROLLER

SUN2000-5/6/8/10/12K-MAP0



#### Asymmetric Load

Three-phase asymmetric output  
200% overload



#### Active Safety

AFCI & RSD (with optimizer)  
Connector temperature detection



#### Future Ready

LUNA S0 or S1  
Whole home backup (with SmartGuard)

# **SUN2000-5/6/8/10/12K-MAP0** **Technical Specification**

| Technical Specification              | SUN2000<br>-5K-MAP0                                                                                                                                                                                                          | SUN2000<br>-6K-MAP0 | SUN2000<br>-8K-MAP0 | SUN2000<br>-10K-MAP0                   | SUN2000<br>-12K-MAP0 |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|----------------------------------------|----------------------|
| Max. efficiency                      | 98.4%                                                                                                                                                                                                                        | 98.6%               | 98.6%               | 98.6%                                  | 98.6%                |
| European weighted efficiency         | 97.5%                                                                                                                                                                                                                        | 97.7%               | 98.0%               | 98.1%                                  | 98.2%                |
| Input (PV)                           |                                                                                                                                                                                                                              |                     |                     |                                        |                      |
| Recommended max. PV power            | 9,000 Wp                                                                                                                                                                                                                     | 11,000 Wp           | 14,600 Wp           | 18,000 Wp                              | 22,000 Wp            |
| Max. input voltage <sup>1</sup>      | 1,100 V                                                                                                                                                                                                                      |                     |                     |                                        |                      |
| Operating voltage range <sup>2</sup> | 160 ~ 1,000 V                                                                                                                                                                                                                |                     |                     |                                        |                      |
| Startup voltage                      | 160 V                                                                                                                                                                                                                        |                     |                     |                                        |                      |
| Rated input voltage                  | 600 V                                                                                                                                                                                                                        |                     |                     |                                        |                      |
| Max. input current per MPPT          | 16 A                                                                                                                                                                                                                         |                     |                     |                                        |                      |
| Max. short-circuit current           | 22 A                                                                                                                                                                                                                         |                     |                     |                                        |                      |
| Number of MPP trackers               | 2                                                                                                                                                                                                                            |                     |                     |                                        |                      |
| Max. input per MPP tracker           | 1                                                                                                                                                                                                                            |                     |                     |                                        |                      |
| Input (DC Battery)                   |                                                                                                                                                                                                                              |                     |                     |                                        |                      |
| Compatible battery                   | LUNA2000-5/10/15-S0 / LUNA2000-7/14/21-S1                                                                                                                                                                                    |                     |                     |                                        |                      |
| Operating voltage range              | 600 ~ 980 V                                                                                                                                                                                                                  |                     |                     |                                        |                      |
| Max. operating current               | 20 A                                                                                                                                                                                                                         |                     |                     |                                        |                      |
| Max. charging power                  | 12,000 W                                                                                                                                                                                                                     |                     |                     |                                        |                      |
| Max. discharging power               | 5,500 W                                                                                                                                                                                                                      | 6,600 W             | 8,800 W             | 11,000 W                               | 12,000 W             |
| Output (On Grid)                     |                                                                                                                                                                                                                              |                     |                     |                                        |                      |
| Grid connection                      | Three-phase                                                                                                                                                                                                                  |                     |                     |                                        |                      |
| Rated output power                   | 5,000 W                                                                                                                                                                                                                      | 6,000 W             | 8,000 W             | 10,000 W                               | 12,000 W             |
| Max. apparent power                  | 5,500 VA                                                                                                                                                                                                                     | 6,600 VA            | 8,800 VA            | 11,000 VA                              | 13,200 VA            |
| Rated output voltage                 | 220 V AC/380 V AC, 230 V AC/400 V AC, 240 V AC/415 V AC 3W/N + PE                                                                                                                                                            |                     |                     |                                        |                      |
| Overload capability                  | 110%                                                                                                                                                                                                                         |                     |                     |                                        |                      |
| Rated AC grid frequency              | 50 Hz/60 Hz                                                                                                                                                                                                                  |                     |                     |                                        |                      |
| Max. output current                  | 8.3 A                                                                                                                                                                                                                        | 10.0 A              | 13.3 A              | 16.7 A                                 | 20.2 A               |
| Adjustable power factor              | 0.8 leading ... 0.8 lagging                                                                                                                                                                                                  |                     |                     |                                        |                      |
| Max. total harmonic distortion       | ≤ 3%                                                                                                                                                                                                                         |                     |                     |                                        |                      |
| Output (Off Grid)                    |                                                                                                                                                                                                                              |                     |                     |                                        |                      |
| Compatible backup device             | SmartGuard-63A-T0 (3 phase)                                                                                                                                                                                                  |                     |                     |                                        |                      |
| Rated output power                   | 5,000 W                                                                                                                                                                                                                      | 6,000 W             | 8,000 W             | 10,000 W                               | 12,000 W             |
| Rated output voltage                 | 220 V AC/380 V AC, 230 V AC/400 V AC, 240 V AC/415 V AC 3W/N + PE                                                                                                                                                            |                     |                     |                                        |                      |
| 110% overload                        | Continuous                                                                                                                                                                                                                   |                     |                     |                                        |                      |
| 150% overload                        | 5 min (3-phase) / 5 min (Single-phase)                                                                                                                                                                                       |                     |                     | 1 min (3-phase) / 5 min (Single-phase) |                      |
| 200% overload                        | 10 seconds                                                                                                                                                                                                                   |                     |                     |                                        |                      |
| Automatic switchover time            | ≤ 20 ms (with SmartGuard-63A-T0)                                                                                                                                                                                             |                     |                     |                                        |                      |
| Protection Feature                   |                                                                                                                                                                                                                              |                     |                     |                                        |                      |
| Asymmetric load                      | Yes, supports 100% three-phase asymmetric load                                                                                                                                                                               |                     |                     |                                        |                      |
| Input-side disconnection device      | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| Anti-islanding protection            | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| DC reverse polarity protection       | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| Insulation detection                 | 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 detection           | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| AC overcurrent protection            | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| AC short-circuit protection          | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| AC overvoltage protection            | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| Arc fault protection                 | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| Connector temperature detection      | Yes (PV & Battery connectors)                                                                                                                                                                                                |                     |                     |                                        |                      |
| Ripple receiver control              | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| Battery charging from grid           | Yes                                                                                                                                                                                                                          |                     |                     |                                        |                      |
| General Specification                |                                                                                                                                                                                                                              |                     |                     |                                        |                      |
| Operating temperature range          | -25°C - +60°C (-13°F - +140°F)                                                                                                                                                                                               |                     |                     |                                        |                      |
| Relative operating humidity          | 0 % - 100% RH                                                                                                                                                                                                                |                     |                     |                                        |                      |
| Max. operating altitude              | 4,000 m                                                                                                                                                                                                                      |                     |                     |                                        |                      |
| Cooling                              | Natural convection                                                                                                                                                                                                           |                     |                     |                                        |                      |
| Noise                                | ≤ 29 dB                                                                                                                                                                                                                      |                     |                     |                                        |                      |
| Display                              | LED Indicators; Integrated WLAN + FusionSolar APP                                                                                                                                                                            |                     |                     |                                        |                      |
| Communication                        | RS485; WLAN / Ethernet via Smart Dongle-WLAN-FE (Optional)<br>4G/3G/2G via Smart Dongle-4G (Optional); EMMA (Optional)                                                                                                       |                     |                     |                                        |                      |
| Weight (incl. mounting brackets)     | 21 kg                                                                                                                                                                                                                        |                     |                     |                                        |                      |
| Dimensions (incl. mounting brackets) | 490 mm x 460 mm x 130 mm                                                                                                                                                                                                     |                     |                     |                                        |                      |
| IP rating                            | IP66                                                                                                                                                                                                                         |                     |                     |                                        |                      |
| Nighttime power                      | < 5.5 W                                                                                                                                                                                                                      |                     |                     |                                        |                      |
| Optimizer Compatibility              |                                                                                                                                                                                                                              |                     |                     |                                        |                      |
| DC MBUS compatible optimizer         | SUN2000-450W-P2, SUN2000-600W-P                                                                                                                                                                                              |                     |                     |                                        |                      |
| Safety                               | EN/IEC62109-1, EN/IEC62109-2                                                                                                                                                                                                 |                     |                     |                                        |                      |
| Grid connection standards            | IEC61727, IEC62116, MEA/PEA, G99, Philippine Grid Code Resolution No. 07, NRS 097-2-1, EN50549-1, VDE4105, UTE15-712-1/VFR 2019, UNE217002, NTS631, RD244(UNE217001), PPDS, ROGA, TOR Erzeuger, CEI 0-21:2020-12 V1, C10/C11 |                     |                     |                                        |                      |

\*1 The max. input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage the inverter.

\*2 Any DC input voltage beyond the operating voltage range may result in inverter malfunction.

Disclaimer: the preceding values are measured by an internal laboratory of Huawei in a specific environment. The actual values may vary with products, software versions, usage conditions, and environmental factors.

Version No.: 02-202406

# SMART ENERGY CONTROLLER

SUN2000-8/10K-LC0



**Active Safety**  
Active Arcing Protection



**Higher Yields**  
Up to 30% More Energy  
with Optimizer



**Battery Ready**  
Plug & Play, Whole-house  
power backup

# SUN2000-8/10K-LC0 Technical Specification

| Technical Specification                            | SUN2000-8K-LC0                                                                                                                                                                       | SUN2000-10K-LC0   |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Efficiency                                         |                                                                                                                                                                                      |                   |
| Max. efficiency                                    | 98.1%                                                                                                                                                                                |                   |
| European weighted efficiency                       | 97.5%                                                                                                                                                                                |                   |
| Input (PV)                                         |                                                                                                                                                                                      |                   |
| Recommended max. PV power <sup>1</sup>             | 12,000 Wp                                                                                                                                                                            | 15,000 Wp         |
| Max. input voltage                                 | 600 V                                                                                                                                                                                |                   |
| Startup voltage                                    | 50 V                                                                                                                                                                                 |                   |
| MPPT operating voltage range                       | 40 ~ 560 V                                                                                                                                                                           |                   |
| Rated input voltage                                | 360 V                                                                                                                                                                                |                   |
| Max. input current per MPPT                        | 16 A                                                                                                                                                                                 |                   |
| Max. short-circuit current                         | 20 A                                                                                                                                                                                 |                   |
| Max. number of inputs                              | 3                                                                                                                                                                                    |                   |
| Number of MPP trackers                             | 3                                                                                                                                                                                    |                   |
| Input (DC Battery)                                 |                                                                                                                                                                                      |                   |
| Compatible battery                                 | LUNA2000-5/10/15-S0, LUNA2000-7/14/21-S1                                                                                                                                             |                   |
| Operating voltage range                            | 350 ~ 560 Vdc                                                                                                                                                                        |                   |
| Max. operating current                             | 25 A                                                                                                                                                                                 |                   |
| Max. charge power                                  | 8,000 W                                                                                                                                                                              | 10,000 W          |
| Max. discharge power                               | 8,000 W                                                                                                                                                                              | 10,000 W          |
| Output (On Grid)                                   |                                                                                                                                                                                      |                   |
| Grid connection                                    | Single-phase                                                                                                                                                                         |                   |
| Rated output power                                 | 8,000 W                                                                                                                                                                              | 10,000 W          |
| Max. apparent power                                | 8,800 VA                                                                                                                                                                             | 10,000 VA         |
| Rated output voltage                               | 220 Vac / 230 Vac / 240 Vac, L / N + PE                                                                                                                                              |                   |
| Max. output current                                | 40.0 A                                                                                                                                                                               | 45.5 A            |
| Rated AC grid frequency                            | 50 Hz/60 Hz                                                                                                                                                                          |                   |
| Adjustable power factor                            | 0.8 leading ... 0.8 lagging                                                                                                                                                          |                   |
| Max. total harmonic distortion                     | ≤ 3%                                                                                                                                                                                 |                   |
| Backup power output                                | Yes (via SmartGuard-63A-S0)                                                                                                                                                          |                   |
| Features & Protection                              |                                                                                                                                                                                      |                   |
| 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 unit                   | Yes                                                                                                                                                                                  |                   |
| AC overcurrent protection                          | Yes                                                                                                                                                                                  |                   |
| AC short-circuit protection                        | Yes                                                                                                                                                                                  |                   |
| AC overvoltage protection                          | Yes                                                                                                                                                                                  |                   |
| Over-heat protection                               | Yes                                                                                                                                                                                  |                   |
| Arc fault protection                               | Yes                                                                                                                                                                                  |                   |
| Battery charging from grid                         | Yes                                                                                                                                                                                  |                   |
| General Data                                       |                                                                                                                                                                                      |                   |
| Operating temperature range                        | -25°C to +60°C (-13 °F ~ 140 °F)                                                                                                                                                     |                   |
| Relative operating humidity                        | 0%-100% RH                                                                                                                                                                           |                   |
| Operating altitude                                 | 0-4,000 m (Derating above 2,000 m)                                                                                                                                                   |                   |
| Cooling                                            | Natural convection                                                                                                                                                                   | Smart Air Cooling |
| Display                                            | LED indicators; integrated WLAN + FusionSolar app                                                                                                                                    |                   |
| Communication                                      | RS485, WLAN / Ethernet via Smart Dongle-WLAN-FE (Optional)<br>4G / 3G / 2G via Smart Dongle-4G (Optional), EMMA                                                                      |                   |
| Weight                                             | 14.5 kg                                                                                                                                                                              | 15 kg             |
| Dimensions (W x H x D)<br>(incl. mounting plate)   | 425 mm x 376.5 mm x 150 mm                                                                                                                                                           |                   |
| Degree of protection                               | IP66                                                                                                                                                                                 |                   |
| Optimizer Compatibility                            |                                                                                                                                                                                      |                   |
| Compatible optimizer                               | SUN2000-450W-P2, SUN2000-600W-P                                                                                                                                                      |                   |
| Standards Compliance (More Available Upon Request) |                                                                                                                                                                                      |                   |
| Certificates                                       | EN/IEC 62109-1, EN/IEC 62109-2                                                                                                                                                       |                   |
| Grid connection standards                          | EN 50549-1, UNE 217001/RD244, UNE 217002, NTS, VDE 0126-1-1, ABNT, P140, NRS 097-2-1, IEC 61000-2-2, PEA, MEA, G99, IEC 61727, IEC 62116, IEC 63027, IEEE 1547, PGC Resolution No.07 |                   |

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

Disclaimer: the preceding values are measured by an internal laboratory of Huawei in a specific environment. The actual values may vary with products, software versions, usage conditions, and environmental factors.

# SMART ENERGY CONTROLLER

SUN2000-12/15/17/20/25K-MB0



**Active Safety**  
AFCI Active Arcing  
Protection



**Higher Yields**  
Up to 30% More Energy  
with Optimizer <sup>1</sup>



**Battery Ready**  
2 Battery Terminals;  
Compatible with LUNA2000-S0

# SUN2000-12/15/17/20/25K-MB0 Technical Specification

| Technical Specification <sup>1</sup>                   | SUN2000-12K-MB0                                                                                                                                                                                                                                                                                                        | SUN2000-15K-MB0  | SUN2000-17K-MB0  | SUN2000-20K-MB0  | SUN2000-25K-MB0  |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
| Efficiency                                             |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Max. efficiency                                        | 98.4%                                                                                                                                                                                                                                                                                                                  | 98.4%            | 98.4%            | 98.4%            | 98.4%            |
| European weighted efficiency                           | 97.9%                                                                                                                                                                                                                                                                                                                  | 98.0%            | 98.1%            | 98.1%            | 98.2%            |
| DC Input                                               |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Recommended max. PV power                              | 18,000 Wp                                                                                                                                                                                                                                                                                                              | 22,500 Wp        | 22,500 Wp        | 30,000 Wp        | 37,500 Wp        |
| Max. input voltage <sup>2</sup>                        | 1,100 V                                                                                                                                                                                                                                                                                                                |                  |                  |                  |                  |
| Max. input current per MPPT                            | 30 A (two strings) / 20 A (single string)                                                                                                                                                                                                                                                                              |                  |                  |                  |                  |
| Max. short-circuit current                             | 40 A                                                                                                                                                                                                                                                                                                                   |                  |                  |                  |                  |
| Start-up voltage                                       | 200 V                                                                                                                                                                                                                                                                                                                  |                  |                  |                  |                  |
| MPPT operating voltage range <sup>3</sup>              | 200 V ~ 1,000 V                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Full-load MPPT voltage range                           | 370 V ~ 800 V                                                                                                                                                                                                                                                                                                          | 410 V~800 V      | 440 V ~ 800 V    | 480 V~800 V      | 530 V ~ 800 V    |
| Rated input voltage                                    | 600 V                                                                                                                                                                                                                                                                                                                  |                  |                  |                  |                  |
| Max. number of inputs                                  | 4                                                                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Number of MPP trackers                                 | 2                                                                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Smart String Energy Storage System Terminal            |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Compatible Smart String ESS                            | LUNA2000-5/10/15-S0, LUNA2000-7/14/21-S1                                                                                                                                                                                                                                                                               |                  |                  |                  |                  |
| Number of terminals                                    | 2                                                                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Max. charging power                                    | 21 kW (Single string) / 25 kW (Two strings)                                                                                                                                                                                                                                                                            |                  |                  |                  |                  |
| Max. discharge power                                   | 13.2 kW                                                                                                                                                                                                                                                                                                                | 16.5 kW          | 18.7 kW          | 22.0 kW          | 25.0 kW          |
| Max. operating current                                 | 26.25 A (per string)                                                                                                                                                                                                                                                                                                   |                  |                  |                  |                  |
| Operating voltage range                                | 600 V ~ 980 V                                                                                                                                                                                                                                                                                                          |                  |                  |                  |                  |
| Output                                                 |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Rated output power                                     | 12,000 W                                                                                                                                                                                                                                                                                                               | 15,000 W         | 17,000 W         | 20,000 W         | 25,000 W         |
| Max. apparent power                                    | 13,200 VA                                                                                                                                                                                                                                                                                                              | 16,500 VA        | 18,700 VA        | 22,000 VA        | 27,500 VA        |
| Max. active power (cosφ = 1)                           | 13,200 W                                                                                                                                                                                                                                                                                                               | 16,500 W         | 18,700 W         | 22,000 W         | 27,500 W         |
| Rated output voltage                                   | 220 Vac / 380 Vac, 230 Vac / 400 Vac, 240 Vac / 415 Vac; 3 W / N + PE                                                                                                                                                                                                                                                  |                  |                  |                  |                  |
| Rated output current                                   | 18.2 A / 380 Vac                                                                                                                                                                                                                                                                                                       | 22.8 A / 380 Vac | 25.8 A / 380 Vac | 30.4 A / 380 Vac | 38.0 A / 380 Vac |
|                                                        | 17.3 A / 400 Vac                                                                                                                                                                                                                                                                                                       | 21.7 A / 400 Vac | 24.5 A / 400 Vac | 28.9 A / 400 Vac | 36.1 A / 400 Vac |
|                                                        | 16.7 A / 415 Vac                                                                                                                                                                                                                                                                                                       | 20.9 A / 415 Vac | 23.7 A / 415 Vac | 27.8 A / 415 Vac | 34.8 A / 415 Vac |
| Max. output current                                    | 20.2 A / 380 Vac                                                                                                                                                                                                                                                                                                       | 25.2 A / 380 Vac | 28.6 A / 380 Vac | 33.6 A / 380 Vac | 42.0 A / 380 Vac |
|                                                        | 19.1 A / 400 Vac                                                                                                                                                                                                                                                                                                       | 23.9 A / 400 Vac | 27.1 A / 400 Vac | 31.9 A / 400 Vac | 39.9 A / 400 Vac |
|                                                        | 18.5 A / 415 Vac                                                                                                                                                                                                                                                                                                       | 23.1 A / 415 Vac | 26.1 A / 415 Vac | 30.8 A / 415 Vac | 38.5 A / 415 Vac |
| Rated AC grid frequency                                | 50 Hz / 60 Hz                                                                                                                                                                                                                                                                                                          |                  |                  |                  |                  |
| Adjustable power factor                                | 0.8 leading ... 0.8 lagging                                                                                                                                                                                                                                                                                            |                  |                  |                  |                  |
| Max. total harmonic distortion                         | ≤ 3%                                                                                                                                                                                                                                                                                                                   |                  |                  |                  |                  |
| Feature & Protection                                   |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Overvoltage category                                   | PV II /AC III                                                                                                                                                                                                                                                                                                          |                  |                  |                  |                  |
| Input-side disconnection device                        | Yes                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |                  |
| Anti-islanding protection                              | Yes                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |                  |
| AC over-current protection                             | Yes                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |                  |
| DC reverse-polarity protection                         | Yes                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |                  |
| DC surge protection                                    | TYPE II                                                                                                                                                                                                                                                                                                                |                  |                  |                  |                  |
| AC surge protection                                    | Yes, compatible with TYPE II protection class according to EN/IEC 61643-11                                                                                                                                                                                                                                             |                  |                  |                  |                  |
| DC insulation resistance detection                     | Yes                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |                  |
| Residual current monitoring unit                       | Yes                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |                  |
| Arc fault protection                                   | Yes                                                                                                                                                                                                                                                                                                                    |                  |                  |                  |                  |
| General Data                                           |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Operating temperature range                            | -25 °C ~ +60 °C (-13 °F ~ 140 °F)                                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Relative humidity                                      | 0 % RH ~ 100 % RH                                                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Max. operating altitude                                | 4,000 m (13,123 ft.) (Derating above 2,000 m)                                                                                                                                                                                                                                                                          |                  |                  |                  |                  |
| Cooling                                                | Smart air cooling                                                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Display                                                | LED indicators, Integrated WLAN + FusionSolar APP                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Communication                                          | RS485; WLAN / Ethernet via Smart Dongle-WLAN-FE (Optional)<br>4G / 3G / 2G via Smart Dongle-4G (Optional); EMMA (Optional)                                                                                                                                                                                             |                  |                  |                  |                  |
| Weight                                                 | 21 kg                                                                                                                                                                                                                                                                                                                  |                  |                  |                  |                  |
| Dimensions (W x H x D)                                 | 546 x 460 x 228 mm (21.5 x 18.1 x 9.0 inch)                                                                                                                                                                                                                                                                            |                  |                  |                  |                  |
| Protection level                                       | IP66                                                                                                                                                                                                                                                                                                                   |                  |                  |                  |                  |
| Max. number of paralleled unit (with Smart String ESS) | 3                                                                                                                                                                                                                                                                                                                      |                  |                  |                  |                  |
| Optimizer Compatibility                                |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Compatible optimizer                                   | SUN2000-450W-P2, SUN2000-600W-P, MERC-1100W-P, MERC-1300W-P                                                                                                                                                                                                                                                            |                  |                  |                  |                  |
| Standards Compliance (More Available Upon Request)     |                                                                                                                                                                                                                                                                                                                        |                  |                  |                  |                  |
| Certificates                                           | EN/IEC62109-1, EN/IEC62109-2                                                                                                                                                                                                                                                                                           |                  |                  |                  |                  |
| Grid connection standards                              | IEC61727, IEC62116, IEC61683, EN50530, ABNT NBR 16149/16150, MEA/PEA, G99, IRR-DCC-MV/IRR-TIC, Philippine Grid Code Resolution No. 07, NRS 097-2-1, EN50549-1, VDE4105, UTE15-712-1/VFR 2019, UNE217002, NTS631, RD244(UNE217001), PPDS, ROGA, TOR Erzeuger, CEI 0-21:2020-12 V1, CEI-016, C10/C11, EN50549-2, VDE4110 |                  |                  |                  |                  |

\*1 For Thailand, only SUN2000-12K-MB0 & SUN2000-15K-MB0 & SUN2000-20K-MB0 are available.

\*2 The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.

\*3 Any DC input voltage beyond the operating voltage range may result in inverter improper operating.