

GOODWE

MS Series

5-10kW | 3 MPPTs | Single Phase

The MS Series of 5-10kW single phase inverters with 3 MPPTs for complex rooftops, is a powerful and versatile solution for the expanding need of the residential market. It is truly a champion over the competition in terms of DC oversizing, offering as much as 200% and achieving up to 110% AC overloading. With a start-up voltage of only 80V, the MS series is able to generate electricity earlier than equivalent products, achieving a high efficiency of 97.7%. The MS is compatible with bi-facial modules and its maximum current input reaches 16 A per string. The MS also comes with integrated Arc-Fault Circuit Interrupter (AFCI) protection and is lightweight for easy installation.



Compatible with bi-facial modules



97.7% max. Efficiency



3 MPPTs



Up to 110% AC output overloading



80V Startup Voltage



Up to 200% DC input oversizing

| Technical Data | GW5000-MS | GW6000-MS | GW8500-MS | GW10K-MS |
|---|--|------------------------------|------------------------------|------------------------------|
| Input | | | | |
| Max. Input Power (W) | 10000 | 12000 | 13500 | 13500 |
| Max. Input Voltage (V) | 600 | 600 | 600 | 600 |
| MPPT Operating Voltage Range (V) | 80 ~ 550 | 80 ~ 550 | 80 ~ 550 | 80 ~ 550 |
| Start-up Voltage (V) | 80 | 80 | 80 | 80 |
| Nominal Input Voltage (V) | 360 | 360 | 360 | 360 |
| Max. Input Current per MPPT (A) | 16 | 16 | 16 | 16 |
| Max. Short Circuit Current per MPPT (A) | 20 | 20 | 20 | 20 |
| Number of MPP Trackers | 3 | 3 | 3 | 3 |
| Number of Strings per MPPT | 1 | 1 | 1 | 1 |
| Output | | | | |
| Nominal Output Power (W) | 5000 | 6000 | 8500 | 10000 |
| Nominal Output Apparent Power (VA) | 5000 | 6000 | 8500 | 10000 |
| Max. AC Active Power (W) ^{*1} | 5500 | 6600 | 9350 | 10000 |
| Max. AC Apparent Power (VA) ^{*2} | 5500 | 6600 | 9350 | 10000 |
| Nominal Output Voltage (V) | 220 / 230 / 240 | 220 / 230 / 240 | 220 / 230 / 240 | 220 / 230 / 240 |
| Nominal AC Grid Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 |
| Max. Output Current (A) | 25.0 | 30.0 | 42.5 | 45.5 |
| Power Factor | ~ 1 (Adjustable from 0.8 leading to 0.8 lagging) | | | |
| Max. Total Harmonic Distortion | <3% | <3% | <3% | <3% |
| Efficiency | | | | |
| Max. Efficiency | 97.7% | 97.7% | 97.7% | 97.7% |
| European Efficiency | 97.3% | 97.3% | 97.3% | 97.3% |
| Protection | | | | |
| PV Insulation Resistance Detection | Integrated | Integrated | Integrated | Integrated |
| Residual Current Monitoring | Integrated | Integrated | Integrated | Integrated |
| PV Reverse Polarity Protection | Integrated | Integrated | Integrated | Integrated |
| Anti-islanding Protection | Integrated | Integrated | Integrated | Integrated |
| AC Overcurrent Protection | Integrated | Integrated | Integrated | Integrated |
| AC Short Circuit Protection | Integrated | Integrated | Integrated | Integrated |
| AC Overvoltage Protection | Integrated | Integrated | Integrated | Integrated |
| DC Switch | Integrated | Integrated | Integrated | Integrated |
| DC Surge Protection | Type II | Type II | Type II | Type II |
| AC Surge Protection | Type III (Type II Optional) | | | |
| AFCI | Optional | Optional | Optional | Optional |
| Remote Shutdown | Optional | Optional | Optional | Optional |
| General Data | | | | |
| Operating Temperature Range (°C) | -25 ~ +60 | -25 ~ +60 | -25 ~ +60 | -25 ~ +60 |
| Relative Humidity | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% |
| Max. Operating Altitude (m) | 3000 | 3000 | 3000 | 3000 |
| Cooling Method | Natural Convection | Natural Convection | Natural Convection | Natural Convection |
| User Interface | LED, LCD | LED, LCD | LED, LCD | LED, LCD |
| Communication | WiFi, RS485 or LAN (Optional) | | | |
| Communication Protocols | Modbus-RTU (SunSpec Compliant) | | | |
| Weight (kg) | 22.5 | 22.5 | 22.5 | 22.5 |
| Dimension (W × H × D mm) | 511 × 415 × 175 | 511 × 415 × 175 | 511 × 415 × 175 | 511 × 415 × 175 |
| Topology | Non-isolated | Non-isolated | Non-isolated | Non-isolated |
| Self-consumption at Night (W) | <1 | <1 | <1 | <1 |
| Ingress Protection Rating | IP65 | IP65 | IP65 | IP65 |
| DC Connector | MC4 (4 ~ 6 mm ²) | MC4 (4 ~ 6 mm ²) | MC4 (4 ~ 6 mm ²) | MC4 (4 ~ 6 mm ²) |
| AC Connector | AC Connector | AC Connector | AC Connector | AC Connector |
| Country of Manufacture | China | China | China | China |

*: Please visit GoodWe website for the latest certificates.

*1: For Belgium Max. AC Active Power (W): GW5000-MS is 5000, GW6000-MS is 6000, GW7000-MS is 7000, GW8500-MS is 8500, GW10K-MS is 10000.

*2: For Belgium Max. Output Apparent Power (VA): GW5000-MS is 5000, GW6000-MS is 6000, GW7000-MS is 7000, GW8500-MS is 8500, GW10K-MS is 10000.