

GOODWE

MS Series

5-10kW | 3 MPPTs | Single Phase

The MS Series is GoodWe's answer to the residential segment's expanding needs. This 5-10 kW, Single Phase, 3 MPPTs inverter is a powerful and versatile solution. It is truly a champion in terms of DC oversizing, offering as much as 200%, way above the competition, making it possible as well to achieve 110% AC overloading. With a start-up voltage of only 80V the MS is able to generate electricity earlier than equivalent products, achieving a high efficiency of 97.7%. This inverter is compatible with bifacial modules and outstandingly and its maximum current input reaches 12.5A per string. The MS comes with an AFCI integrated protection and the light weight allows for effortless 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 | GW7000-MS | GW8500-MS | GW10K-MS |
|------------------------------------|---|----------------------------|----------------------------|----------------------------|----------------------------|
| PV String Input Data | | | | | |
| Max. DC Input Voltage (V) | 600 | 600 | 600 | 600 | 600 |
| MPPT Range (V) | 80~550 | 80~550 | 80~550 | 80~550 | 80~550 |
| Start-up Voltage (V) | 80 | 80 | 80 | 80 | 80 |
| Min. Feed-in Voltage(V) | 120 | 120 | 120 | 120 | 120 |
| Nominal DC Input Voltage (V) | 360 | 360 | 360 | 360 | 360 |
| Max. Input Current (A) | 12.5 / 12.5 / 12.5 | 12.5 / 12.5 / 12.5 | 12.5 / 12.5 / 12.5 | 12.5 / 12.5 / 12.5 | 12.5 / 12.5 / 12.5 |
| Max. Short Current (A) | 15 / 15 / 15 | 15 / 15 / 15 | 15 / 15 / 15 | 15 / 15 / 15 | 15 / 15 / 15 |
| Number of MPPTs | 3 | 3 | 3 | 3 | 3 |
| Number of Strings per MPPT | 1 | 1 | 1 | 1 | 1 |
| AC Output Data | | | | | |
| Nominal Output Power (W) | 5000 | 6000 | 7000 | 8500 | 10000 |
| Max. Output Apparent Power (VA) | 5500 | 6600 | 7700 | 9350 | 10000 |
| Max. AC Active Power (W) | 5500 | 6600 | 7700 | 9350 | 10000 |
| Max. AC Apparent Power (VA) | 5500 | 6600 | 7700 | 9350 | 10000 |
| Nominal Output Voltage (V) | 220 / 230 | 220 / 230 | 220 / 230 | 220 / 230 | 220 / 230 |
| Nominal Output Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 |
| Max. Output Current (A) | 25 | 30 | 35 | 42.5 | 45.5 |
| Output Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | | | |
| Output THDi (@Nominal Output) | <3% | <3% | <3% | <3% | <3% |
| Efficiency | | | | | |
| Max. Efficiency | 97.7% | 97.7% | 97.7% | 97.7% | 97.7% |
| European Efficiency | 97.3% | 97.3% | 97.3% | 97.3% | 97.3% |
| Protection | | | | | |
| PV Insulation Resistance Detection | Integrated | Integrated | Integrated | Integrated | Integrated |
| Residual Current Monitoring | Integrated | Integrated | Integrated | Integrated | Integrated |
| DC Reverse Polarity Protection | Integrated | Integrated | Integrated | Integrated | Integrated |
| Anti-islanding Protection | Integrated | Integrated | Integrated | Integrated | Integrated |
| AC Overcurrent Protection | Integrated | Integrated | Integrated | Integrated | Integrated |
| AC Short Circuit Protection | Integrated | Integrated | Integrated | Integrated | Integrated |
| AC Overvoltage Protection | Integrated | Integrated | Integrated | Integrated | Integrated |
| DC Switch | Integrated | Integrated | Integrated | Integrated | Integrated |
| DC Surge Protection | Type II | Type II | Type II | Type II | Type II |
| AC Surge Protection | Type III(Type II Optional) | | | | |
| Remote Shutdown | Optional | Optional | Optional | Optional | Optional |
| General Data | | | | | |
| Operating Temperature Range (°C) | -25~60 | -25~60 | -25~60 | -25~60 | -25~60 |
| Relative Humidity | 0~100% | 0~100% | 0~100% | 0~100% | 0~100% |
| Max. Operating Altitude (m) | 4000 | 4000 | 4000 | 4000 | 4000 |
| Cooling Method | Natural Convection | Natural Convection | Natural Convection | Natural Convection | Natural Convection |
| Display | LED , LCD | LED , LCD | LED , LCD | LED , LCD | LED , LCD |
| Communication | RS485/Wi-Fi/LAN (Optional) | | | | |
| Communication protocols | SunSpec Modbus | SunSpec Modbus | SunSpec Modbus | SunSpec Modbus | SunSpec Modbus |
| Weight (kg) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Dimension WxHxD (mm) | 511x415x175 | 511x415x175 | 511x415x175 | 511x415x175 | 511x415x175 |
| Topology | Non-isolated | Non-isolated | Non-isolated | Non-isolated | Non-isolated |
| Self-consumption at Night (W) | <1 | <1 | <1 | <1 | <1 |
| Ingress Protection Rating | IP65 | 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) | MC4 (4~6 mm ²) |
| AC Connector | AC Connector | AC Connector | AC Connector | AC Connector | AC Connector |

*: Please visit GoodWe website for the latest certificates.