

# GOODWE

## MS Series

### 5-10kW | Single Phase | 3 MPPTs

The MS Series is GoodWe's answer to the residential segment's expanding needs. This 5-10kW, 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 16A 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 |
|-------------------------------------------|-------------------------------------------------|-----------|-----------|-----------|----------|
| <b>Input</b>                              |                                                 |           |           |           |          |
| Max.Input Voltage (V)                     | 600                                             |           |           |           |          |
| MPPT Operating Voltage Range (V)          | 80 ~ 550                                        |           |           |           |          |
| Start-up Voltage (V)                      | 80                                              |           |           |           |          |
| Nominal Input Voltage (V)                 | 360                                             |           |           |           |          |
| Max. Input Current per MPPT (A)           | 16                                              |           |           |           |          |
| Max. Short Circuit Current per MPPT (A)   | 20                                              |           |           |           |          |
| Number of MPP Trackers                    | 3                                               |           |           |           |          |
| Number of Strings per MPPT                | 1                                               |           |           |           |          |
| <b>Output</b>                             |                                                 |           |           |           |          |
| Nominal Output Power (W)                  | 5000                                            | 6000      | 7000      | 8500      | 10000    |
| Nominal Output Apparent Power (VA)        | 5000                                            | 6000      | 7000      | 8500      | 10000    |
| Max. AC Active Power (W) <sup>*1</sup>    | 5500                                            | 6600      | 7700      | 9350      | 10000    |
| Max. AC Apparent Power (VA) <sup>*2</sup> | 5500                                            | 6600      | 7700      | 9350      | 10000    |
| Nominal Output Voltage (V)                | 220 / 230 / 240                                 |           |           |           |          |
| Nominal AC Grid Frequency (Hz)            | 50 / 60                                         |           |           |           |          |
| Max. Output Current (A)                   | 25.0                                            | 30.0      | 35.0      | 42.5      | 45.5     |
| Power Factor                              | ~1 (Adjustable from 0.8 leading to 0.8 lagging) |           |           |           |          |
| Max. Total Harmonic Distortion            | <3%                                             |           |           |           |          |
| <b>Efficiency</b>                         |                                                 |           |           |           |          |
| Max. Efficiency                           | 97.7%                                           |           |           |           |          |
| European Efficiency                       | 97.3%                                           |           |           |           |          |
| <b>Protection</b>                         |                                                 |           |           |           |          |
| PV Insulation Resistance Detection        | Integrated                                      |           |           |           |          |
| Residual Current Monitoring               | Integrated                                      |           |           |           |          |
| PV Reverse Polarity Protection            | Integrated                                      |           |           |           |          |
| Anti-islanding Protection                 | Integrated                                      |           |           |           |          |
| AC Overcurrent Protection                 | Integrated                                      |           |           |           |          |
| AC Short Circuit Protection               | Integrated                                      |           |           |           |          |
| AC Overvoltage Protection                 | Integrated                                      |           |           |           |          |
| DC Switch                                 | Integrated                                      |           |           |           |          |
| DC Surge Protection                       | Type II                                         |           |           |           |          |
| AC Surge Protection                       | Type III (Type II Optional)                     |           |           |           |          |
| AFCI                                      | Optional                                        |           |           |           |          |
| Remote Shutdown                           | Optional                                        |           |           |           |          |
| <b>General Data</b>                       |                                                 |           |           |           |          |
| Operating Temperature Range (°C)          | -25 ~ +60                                       |           |           |           |          |
| Relative Humidity                         | 0 ~ 100%                                        |           |           |           |          |
| Max. Operating Altitude (m)               | 4000                                            |           |           |           |          |
| Cooling Method                            | Natural Convection                              |           |           |           |          |
| User Interface                            | LED, LCD                                        |           |           |           |          |
| Communication                             | WiFi, RS485 or LAN (Optional)                   |           |           |           |          |
| Communication Protocols                   | Modbus-RTU (SunSpec Compliant)                  |           |           |           |          |
| Weight (kg)                               | 22.5                                            |           |           |           |          |
| Dimension (W × H × D mm)                  | 415 × 511 × 175                                 |           |           |           |          |
| Topology                                  | Non-isolated                                    |           |           |           |          |
| Self-consumption at Night (W)             | <1                                              |           |           |           |          |
| Ingress Protection Rating                 | IP65                                            |           |           |           |          |
| DC Connector                              | MC4 (4 ~ 6mm <sup>2</sup> )                     |           |           |           |          |
| AC Connector                              | AC Connector                                    |           |           |           |          |

\*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.

\*: Please visit GoodWe website for the latest certificates.