

# GOODWE

## MS Series

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

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



Up to 16A max. DC input current per string



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
<b>Input</b>				
Max. Input Power (W) <sup>*1</sup>	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
<b>Output</b>				
Nominal Output Power (W)	5000	6000	8500	10000
Nominal Output Apparent Power (VA)	5000	6000	8500	10000
Max. AC Active Power (W)	5500	6600	9350	10000
Max. AC Apparent Power (VA)	5500	6600	9350	10000
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240
Output Voltage Range (V) (according to local standard)	180 ~ 265	180 ~ 265	180 ~ 265	180 ~ 265
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65	45 ~ 55 / 55 ~ 65	45 ~ 55 / 55 ~ 65	45 ~ 55 / 55 ~ 65
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%
<b>Efficiency</b>				
Max. Efficiency	97.7%	97.7%	97.7%	97.7%
European Efficiency	97.3%	97.3%	97.3%	97.3%
<b>Protection</b>				
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
<b>General Data</b>				
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, WLAN + APP			
Communication	WiFi, RS485 or LAN (Optional)			
Communication Protocols	Modbus-RTU (SunSpec Compliant)			
Weight (kg)	22.5	22.5	22.5	22.5
Dimension (W x H x D mm)	415 x 511 x 175	415 x 511 x 175	415 x 511 x 175	415 x 511 x 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 ~ 6mm <sup>2</sup> )	MC4 (4 ~ 6mm <sup>2</sup> )	MC4 (4 ~ 6mm <sup>2</sup> )	MC4 (4 ~ 6mm <sup>2</sup> )
AC Connector	AC Connector	AC Connector	AC Connector	AC Connector
Country of Manufacture	China	China	China	China

\*1: For Brazil Max. Input Power (W), GW5000-MS is 9000, GW6000-MS is 10800, GW8500-MS is 15300, GW10K-MS is 18000.

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