

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 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. Input Voltage (V)	600	600	600	600	600
MPPT Operating Voltage Range (V)	80 ~ 550	80 ~ 550	80 ~ 550	80 ~ 550	80 ~ 550
Start-up Voltage (V)	80	80	80	80	80
Nominal Input Voltage (V)	360	360	360	360	360
Max. Input Current per MPPT (A)	12.5	12.5	12.5	12.5	12.5
Max. Short Circuit Current per MPPT (A)	15	15	15	15	15
Number of MPP Trackers	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)	25.0	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%	<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) ^{*1}	4000	4000	4000	4000	4000
Cooling Method	Natural Convection	Natural Convection	Natural Convection	Natural Convection	Natural Convection
User Interface	LED, LCD, WLAN + APP				
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 (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	415 x 511 x 175
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 ~ 6mm ²)	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)	MC4 (4 ~ 6mm ²)
AC Connector	AC Connector	AC Connector	AC Connector	AC Connector	AC Connector

*1: For Australia, Max. Operating Altitude (m) is 3000.
 *: Please visit GoodWe website for the latest certificates.

GoodWe-Single page-20230417-EN-V2.1. Information may be subject to change without notice during product improving.