

MS G3 Series

5-10kW | Single Phase | 3 MPPTs

The MS G3 single-phase inverters of 5-10kW provide powerful and versatile solution options for residential buildings. This model boasts 3 MPPTs for various complex rooftops, thus leading to high power efficiency. The ultra-low 50V startup voltage allows inverters to kick in earlier during the day and presents more power generation. In addition, by supporting up to 20A DC max. input current per MPPT, the MS G3 Series is ideal for high-power modules, which makes full use of power generated and presents lower LCOE. Importantly, optional PID (potential induced degradation) recovery function is supported for better module performance. The inverter also takes safety measures including optional Arc-Fault Circuit Interrupter (AFCI) and Type III Surge Protection Device (SPD) on both DC & AC sides to protect the system from electrical fire and lightning hazards in extreme environments.



Smart Control & Monitoring

- Smart load control with dry contacts
- 24-hour load consumption monitoring



High Power Generation

- Up to 20A max. DC input current per string
- Optional PID recovery function¹



Superb Safety & Reliability

- Optional AFCI & rapid shutdown¹
- IP66 ingress protection



Friendly & Thoughtful Design

- Fanless cooling for quiet operation
- Software updates via USB

¹: Optional functions or devices are purchased separately.

Technical Data	GW5000-MS-30	GW6000-MS-30	GW7000-MS-30	GW8500-MS-30	GW9900-MS-30	GW10K-MS-30
Input						
Max. Input Power (W)	7750	9300	10850	13175	15500	15500
Max. Input Voltage (V)	600					
MPPT Operating Voltage Range (V)	40 ~ 560					
PV Input Operating Voltage Range (V)	40 ~ 600					
Start-up Voltage (V)	50					
Nominal Input Voltage (V)	360					
Max. Input Current per MPPT (A)	20					
Max. Short Circuit Current per MPPT (A)	25					
Number of MPP Trackers	3					
Number of Strings per MPPT	1					
Output						
Nominal Output Power (W)	5000	6000	7000	8500	9990	10000
Nominal Output Apparent Power (VA)	5000	6000	7000	8500	9990	10000
Max. AC Active Power (W) ^{*1*}	5500	6600	7700	9350	9990	10000
Max. AC Apparent Power (VA) ^{*2*}	5500	6600	7700	9350	9990	10000
Nominal Output Voltage (V)	220 / 230 / 240					
Output Voltage Range (V) (according to local standard)	160 ~ 270					
Nominal AC Grid Frequency (Hz)	50 / 60					
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65					
Max. Output Current (A) ^{*3}	24.0	28.7	33.5	40.7	43.4 ^{*8}	43.5 ^{*9}
Rated Output Current(A)	24.0	28.7	33.5	40.7	43.1	43.5 ^{*9}
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Max. Total Harmonic Distortion	<3%					
Efficiency						
Max. Efficiency ^{*5}	97.8%	97.8%	97.7%	97.9%	97.9%	97.9%
European Efficiency ^{*6}	97.2%	97.2%	97.1%	97.3%	97.3%	97.3%
Protection						
PV String Current Monitoring	Integrated					
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 III (Type II Optional)					
AC Surge Protection	Type III (Type II Optional)					
AFCI	Optional					
PID Recovery	Optional					
Power Supply at Night	Optional					
General Data						
Operating Temperature Range (°C)	-25 ~ +60					
Relative Humidity	0 ~ 100%					
Max. Operating Altitude (m) ^{*7}	4000					
Cooling Method	Natural Convection					
User Interface	LED, LCD (Optional), WLAN + APP					
Communication	WiFi, RS485 or LAN (Optional)					
Communication Protocols	Modbus-RTU (SunSpec Compliant)					
Weight (kg)	19.0					
Dimension (W x H x D mm)	441 x 507 x 210					
Noise Emission (dB)	<30					
Topology	Non-isolated					
Self-consumption at Night (W)	<1					
Ingress Protection Rating	IP66					
DC Connector	MC4 (2.5 ~ 4mm ²)					
AC Connector	Plug and play connector (Max. 16mm ²)					
Country of Manufacture	China					

*1: For Brazil Max. AC Active Power (W) GW7000-MS-30 is 7000, GW8500-MS-30 is 8500.

*2: For Brazil Max. AC Apparent Power (VA) GW7000-MS-30 is 7000, GW8500-MS-30 is 8500.

*3: For Brazil Max. Output Current (A) GW7000-MS-30 is 33.5, GW8500-MS-30 is 40.7, GW10K-MS-30 is 45.5.

*4: For Brazil Max. Efficiency GW7000-MS-30 is 97.5%, GW8500-MS-30 is 97.8%, GW10K-MS-30 is 97.8%.

*5: For Brazil European Efficiency GW7000-MS-30 is 97.0%, GW8500-MS-30 is 97.2%, GW10K-MS-30 is 97.2%.

*6: For where the Nominal Output Voltage (V) is 220, Max. Output Current (A) GW10K-MS-30 is 45.5, Nominal Output Current (A) GW10K-MS-30 is 45.5.

*7: For Chile Max. AC Active Power (W) & Max. Output Apparent Power(VA) GW5000-MS-30 is 5000, GW6000-MS-30 is 6000, GW7000-MS-30 is 7000, GW8500-MS-30 is 8500, GW10K-MS-30 is 10000.

*8: For Brazil Max. Input Power (W), GW5000-MS-30 is 9000, GW6000-MS-30 is 10800, GW8500-MS-30 is 15300, GW10K-MS-30 is 18000.

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