



Flexible design options for maximised energy yield

- ✓ Maximised energy output
- ✓ Smart and efficient operation
- ✓ Modern and compact design
- ✓ Highest safety standards

The MS G3 inverter is an ideal match for residential PV rooftops with a complex layout. With a total of three MPPTs, the inverter accommodates the required design flexibility while enabling high system efficiency. The low start-up voltage enables generation from early morning to late evening and the maximum current input of 20A per string ensures compatibility with high-power solar modules. Optional Arc Fault Failure Interrupter (AFCI) and optional Type II SPD protect the system from electrical fire and lightning hazards. The MS G3 inverter is compatible with SG-ready devices, such as heat-pumps, for a Smart Home System integration. Load monitoring and power export limiting can be provided with GoodWe Homekit 1000 and GM1000.



Up to 20A per string



Low start-up voltage



3 MPPTs to accommodate complex rooftops



Technical Data	GW5000-MS-30	GW6000-MS-30	GW7000-MS-30	GW8500-MS-30	GW10K-MS-30
Input					
Max. Input Voltage (V)	600				
MPPT Operating Voltage Range (V)	40 ~ 560				
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	10000
Nominal Output Apparent Power (VA)	5000	6000	7000	8500	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 / 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)	24.0	28.7	33.5	40.7	43.5 ^{*1}
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion	<3%				
Efficiency					
Max. Efficiency	97.8%	97.8%	97.7%	97.9%	97.9%
European Efficiency	97.2%	97.2%	97.1%	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				
Remote shutdown	Integrated				
PID Recovery	Optional				
Power Supply at Night	Optional				
General Data					
Operating Temperature Range (°C)	-25 ~ +60				
Relative Humidity	0 ~ 100%				
Max. Operating Altitude (m)	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)				

*1: 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.

*: Please visit GoodWe website for the latest certificates.