

Flexible design options for maximised energy yield

- ✓ Flexible and efficient for rooftops with complex layouts
- ✓ Maximised daily energy yield from early morning to late evening
- ✓ Compact, quiet, and installer-friendly design
- ✓ Advanced fire safety and surge protection

The fourth generation of GoodWe's MS single-phase inverter is the optimal solution for residential PV rooftops with complex layouts. It features three MPPTs, allowing more flexible PV string design and higher energy harvest. With 200% PV oversizing, 20A input per string, and a low start-up voltage, the MS G4 maximizes generation even under weak sunlight conditions. The MS G4 supports mixed parallel installation with DNS G4 using the EzLink3000 smart dongle-offering scalable, modular, and cost-effective system expansion. Optional AI-driven AFCI 3.0, Rapid Shutdown 2.0 with built-in transmitter, and Type II SPD on both AC & DC sides ensure maximum protection and compliance with global safety standards. Compact, quiet (<30dB), and cyber-secure, the MS G4 is designed to meet both today's and tomorrow's residential energy demands.



200% PV oversizing & 20A max per string



Optional AI-driven AFCI 3.0 & SPD Type II (AC & DC)



Parallel-ready with DNS G4 via EzLink3000

Technical Data		GW7.5K-MS-G40	GW8.5K-MS-G40	GW10K-MS-G40
Input				
Max. Input Voltage (V) ^{†1}		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)		26		
Number of MPP Trackers		3	3	3
Number of Strings per MPPT		1		
Output				
Nominal Output Power (W)		7500	8500	10000
Nominal Output Apparent Power (VA)		7500	8500	10000
Max. AC Active Power (W)		7500	8500	10000
Max. AC Apparent Power (VA)		7500	8500	10000
Nominal Output Voltage (V)		220 / 230 / 240, L / N / PE		
Output Voltage Range (V)		160 ~ 270 (according to local standard)		
Nominal AC Grid Frequency (Hz)		50 / 60		
AC Grid Frequency Range (Hz)		45 ~ 55 / 55 ~ 65		
Max. Output Current (A)		34.1	38.7	45.5
Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion		<3%		
Efficiency				
Max. Efficiency		97.8%	97.9%	97.9%
European Efficiency		97.2%	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 II		
AC Surge Protection		Type II		
AFCI		Optional		
Remote Shutdown		Integrated		
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		RS485, WIFI, LAN, Bluetooth, 4G		
Communication Protocols		Modbus-RTU (SunSpec Compliant)		
Weight (kg)		16		
Dimension (W × H × D mm)		493 × 365 × 187		
Noise Emission (dB)		<30		
Topology		Non-isolated		
Self-consumption at Night (W)		<1		
Ingress Protection Rating		IP66		
DC Connector		MC4 (4 ~ 6mm ²)		
AC Connector		Plug and play connector (Max. 16mm ²)		

*1: When the input voltage ranges from 560V to 600V, the inverter will enter the standby state. When the input voltage returns to the MPPT operating voltage range of 40V to 560V, the inverter will resume normal operating state.

*: Please visit GoodWe website for the latest certificates.