GOODWE

Flexible design options for maximised energy yield

- Flexible and efficient for rooftops with complex layouts
- Maximised daily energy yield including power supply at night
- 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 & standard SPD Type II (AC & DC)
- Parallel-ready with DNS G4 via EzLink3000

MS G4 Series String inverter I 5 - 10kW I 3 MPPTs I Single Phase **EMEA**

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		Integrated	
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.

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This datasheet provides information about products offered in the EMEA region.