

GOODWE

DNS G4 Series

3-6kW | Single Phase | 2 MPPTs

As the fourth generation of GoodWe's proven single-phase, dual-MPPT residential inverter, the DNS G4 series delivers enhanced performance, reliability, functionality, and safety—offering homeowners a more powerful and versatile solution for solar needs.



Wide Compatibility

- Compatible with mainstream modules
- 20A per string & 200% PV oversizing



Friendly & Thoughtful Design

- Quiet operation <25dB
- Easy installation, 31% lighter



Superb Safety & Reliability

- Built-in rapid shutdown transmitter
- AI-driven AFCI 3.0 for safety¹



Flexible & Adaptable Applications

- Flexible paralleling with GoodWe MS G4 inverter
- Easy paralleling via GoodWe smart dongle Ezlink3000

1: Optional functions or devices are purchased separately.

Technical Data	GW3K-DNS-G40	GW3.6K-DNS-G40	GW4.2K-DNS-G40	GW5K-DNS-G40	GW6K-DNS-G40
Input					
Max. Input Power (W) ¹	6000	7200	8400	10000	12000
Max. Input Voltage (V) ²	600				
MPPT Operating Voltage Range (V) ³	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	2				
Number of Strings per MPPT	1				
Output					
Nominal Output Power (W)	3000	3600	4200	5000	6000
Nominal Output Apparent Power (VA)	3000	3600	4200	5000	6000
Max. AC Active Power (W)	3000	3600	4200	5000	6000
Max. AC Apparent Power (VA)	3000	3600	4200	5000	6000
Nominal Output Voltage (V)	220 / 230 / 240, L / N / PE				
Output Voltage Range (V)	196 ~ 311 (according to local standard)				
Nominal AC Grid Frequency (Hz)	50 / 60				
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65				
Max. Output Current (A)	13.7	16.4	19.1	22.8	27.3
Rated Output Current (A)	13.7@220V	16.4@220V	19.1@220V	22.8@220V	27.3@220V
	13.1@230V	15.7@230V	18.3@230V	21.8@230V	26.1@230V
	12.5@240V	15.0@240V	17.5@240V	20.9@240V	25.0@240V
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion	<3%				
Efficiency					
Max. Efficiency	98.1%				
European Efficiency	97.2%	97.2%	97.3%	97.4%	97.4%
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 (PV II Optional)				
DC Surge Protection	Type II				
AC Surge Protection	Type II				
AFCI	Optional				
Remote Shutdown	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 / WiFi + APP / Bluetooth + APP				
Communication	RS485, WIFI, LAN, Bluetooth, 4G				
Communication Protocols	Modbus, Sunspec				
Weight (kg)	9.2				
Dimension (W x H x D mm)	358 x 323 x 165				
Noise Emission (dB)	25				
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. 6mm ²)				
Country of Manufacture	China				

*1: The actual value depends on the specific input power of PV panel.

*2: 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.

*3: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.

*: The nominal voltage for AU is 230V and frequency is 50Hz.

*: Please visit GoodWe website for the latest certificates.