

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 ~ 6mm²)		
AC Connector				Plug and play connector (Max. 6mm²)		
Active Anti-islanding Method				SMS(Slip-mode frequency) + AFD ⁴		
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.

*4: AFD: Active Frequency Drift with Positive Feedback.

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

*: Please visit GoodWe website for the latest certificates.