

GOODWE

DNS G3 Series

3-6kW | Single Phase | 2 MPPTs

The GoodWe DNS G3 Series inverter is specially designed for single-phase residential applications. Integrated with high-current input and DC input oversizing capabilities, the series can bring you optimized power generation and make substantial returns. With its lighter and fanless house fit-in compact design, the DNS G3 inverter provides a reliable power supply yet runs at a super quiet operation below 25dB. The inverter also takes safety measures including optional Arc Fault Failure Interrupter (AFCI) and Type II Surge Protection Device (SPD) on both sides to protect the system from electrical fire and lightning hazards in extreme environments for guaranteed safety.



Smart Control & Monitoring

- 24/7 load consumption monitoring¹
- Multiple communication protocols supported



Optimal Generation

- Max. 16A input current per string
- 150% DC input oversizing & 110% AC output overloading



Superb Safety & Reliability

- Optional AFCI preventing electrical fires¹
- Optional AC & DC Type II SPD & SPD failure alarm¹



Friendly & Thoughtful Design

- IP66 ingress protection
- Low noise level thanks to fanless cooling

¹: Optional functions or devices are purchased separately.

Technical Data		GW3000-DNS-30	GW3600-DNS-30	GW4200-DNS-30	GW5000-DNS-30	GW6000-DNS-30
Input						
Max. Input Voltage (V) ⁷			600			
MPPT Operating Voltage Range (V) ⁸			40 ~ 560			
Start-up Voltage (V)			50			
Nominal Input Voltage (V)			360			
Max. Input Current per MPPT (A)			16			
Max. Short Circuit Current per MPPT (A)			23			
Number of MPP Trackers			2			
Number of Strings per MPPT			1			
Output						
Nominal Output Power (W)	3000	3600	4200 ^{*1}	5000	6000	
Nominal Output Apparent Power (VA)	3000	3600	4200 ^{*1}	5000	6000	
Max. AC Active Power (W) ²	3300	3960 ^{*4*6}	4620 ^{*1*4}	5500	6600	
Max. AC Apparent Power (VA) ²	3300	3960 ^{*4*6}	4620 ^{*1*4}	5500	6600	
Nominal Output Voltage (V)			220 / 230 / 240			
Output Voltage Range (V)			196 ~ 311			
Nominal AC Grid Frequency (Hz)			50 / 60			
AC Grid Frequency Range (Hz)			45 ~ 55 / 55 ~ 65			
Max. Output Current (A)	14.4	17.3 ^{*4*5}	20.1 ^{*4}	24.0	28.8	
Power Factor		~ 1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion			<3%			
Efficiency						
Max. Efficiency			97.9%			
European Efficiency	97.0%	97.0%	97.2%	97.3%	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			
DC Surge Protection			Type III (Type II Optional)			
AC Surge Protection			Type III (Type II Optional)			
AFCI			Optional			
Emergency Power Off			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) ³			4000			
Cooling Method			Natural Convection			
Display			LED, LCD (Optional), WLAN + APP			
Communication			WiFi, RS485 or LAN or 4G			
Communication Protocols			Modbus RTU, Modbus TCP			
Weight (kg)	12.8	12.8	12.8	12.8	13.4	
Dimension (W × H × D mm)			350 × 410 × 143			
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)			

*1: For Malaysia GW4200-DNS-30 Nominal Output Power (W) and Nominal Output Apparent Power (VA) and Max. AC Active Power (W) and Max. AC Apparent Power (VA) is 4000.

*2: For Netherland Max. AC Active Power (W) and Max. AC Apparent Power (VA) GW3600-DNS-30 is 3600, GW4200-DNS-30 is 4200; Max. Output Current (A) and Nominal Output Current (A) GW3600-DNS-30 is 15.7, GW4200-DNS-30 is 18.3.

*3: For Australia Max. Operating Altitude (m) GW3000-DNS-30, GW3600-DNS-30, GW4200-DNS-30, GW5000-DNS-30, GW6000-DNS-30 is 3000.

*4: For Chile Max. AC Active Power (W) & Max. Output Apparent Power (VA) GW3000-DNS-30 is 3000, GW3600-DNS-30 is 3600, GW4200-DNS-30 is 4200, GW5000-DNS-30 is 5000, GW6000-DNS-30 is 6000. For Brazil Max. AC Active Power: GW3000-DNS-30 is 3000, GW3600-DNS-30 is 3600, GW4200-DNS-30 is 4200, GW5000-DNS-30 is 5000, GW6000-DNS-30 is 6000, Max. AC Apparent Power (VA): GW5000-DNS-30 is 5300, GW6000-DNS-30 is 6300.

*5: For England Max. Output Current (A) & Nominal Output Current (A) GW3600-DNS-30 is 16A.

*6: For England Max. AC Active Power (W) & Max. AC Apparent Power (VA) GW3600-DNS-30 is 3600.

*7: 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.

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

*: All pictures shown are for reference only. Actual appearance may vary.

*: Please visit GoodWe website for the latest certificates.