

GOODWE

DNS G3 Series

3-6kW | Single Phase | 2 MPPTs

The GoodWe DNS G3 series inverter is designed for single-phase residential applications. Integrated with high-current input and DC input oversizing capabilities, the DNS G3 provides optimised power generation and substantial return on investment. With its lighter and fanless compact design, the DNS G3 inverter provides a reliable power supply that runs at a super quiet operation of less than 25dB. The inverter also takes safety measures including optional Arc Fault Current 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 Power (W)	4500	5400	6300	7500	9000	
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)			16			
Max. Short Circuit Current per MPPT (A)			23			
Number of MPP Trackers			2			
Number of Strings per MPPT			1			
PV Input Operating Voltage Range			40 ~ 600			
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)	3300	3960	4620 ¹	5500	6600	
Max. AC Apparent Power (VA)	3300	3960	4620 ¹	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			
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	21.7 @230V	26.1 @230V	
	12.5 @240V	15.0 @240V	17.5 @240V	20.8 @240V	25.0 @240V	
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			
Power Supply at Night			Optional			
General Data						
Operating Temperature Range (°C)			-25 ~ +60			
Relative Humidity			0 ~ 100%			
Max. Operating Altitude (m)			3000			
Cooling Method			Natural Convection			
User Interface			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)			
Country of Manufacture			China			

*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: 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.

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

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

*: Please visit GoodWe website for the latest certificates.