

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)			600		
MPPT Operating Voltage Range (V)**			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		
Max / Rated Output Current (A)	14.4	17.3	20.1	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		
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 or DI (Ripple Control or DRM) (Optional)		
Communication Protocols			Modbus-RTU (SunSpec Compliant)		
Weight (kg)	12.8	12.8	12.8	12.8	13.4
Dimension (W x H x D mm)			350 x 410 x 143		
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: 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.

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

†: Please visit GoodWe website for the latest certificates.

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