

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.