

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 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)				

*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.