

GOODWE SINGLE-PHASE INVERTERS

DNS G3-SERIES | 3-6KW | 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 is designed for optimising power generation.

The DNS G3 series is lighter, more compact than previous models with a quiet operation below 25dB. The inverter also includes additional safety measures; 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 added safety.

How you benefit:



HIGH EFFICIENCY

97.9% max. Efficiency.



FLEXIBLE DESIGN

Ease of installation and maintenance.



SAFE OPERATION

optional Arc Fault Failure Interrupter.



INNOVATIVE

24/7 load consumption monitoring.



SOLAHART WARRANTY

Enjoy a 10-year warranty, for peace of mind.

Model	GW3000-DNS-30	GW5000-DNS-30	GW6000-DNS-30
Input			
Max. Input Voltage (V)	600	600	600
MPPT Operating Voltage Range (V)	40-560	40-560	40-560
Start-up Voltage (V)	50	50	50
Nominal Input Voltage (V)	360	360	360
Max. Input Current per MPPT (A)	16	16	16
Max. Short Circuit Current per MPPT (A)	23	23	23
Number of MPP Trackers	2	2	2
Number of Strings per MPPT	1	1	1
Output			
Nominal Output Power (W)	3000	5000	6000
Nominal Output Apparent Power (VA)	3000	5000	6000
Max. AC Active Power (W)	3300 ^{*1}	5500 ^{*1}	6000
Max. AC Apparent Power (VA)	3300 ^{*2}	5500 ^{*2}	6000
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	14.4	24	28.8
Power Factor	-1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
Efficiency			
Max. Efficiency	97.9%	97.9%	97.9%
European Efficiency	97.0%	97.3%	97.4%
Protection			
PV String Current Monitoring	Integrated	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated
DC Surge Protection	Type III (Type II Optional)		
AC Surge Protection	Type III (Type II Optional)		
AFCI	Optional	Optional	Optional
Emergency Power Off	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional
General Data			
Operating Temperature Range (°C)	-25-+60	-25-+60	-25-+60
Relative Humidity	0-100%	0-100%	0-100%
Max. Operating Altitude (m)	4000 ^{*3}	4000 ^{*3}	4000 ^{*3}
Cooling Method	Natural Convection		
Display	LED, LCD (Optional) , WLAN+APP		
Communication	RS485 or WiFi or 4G or 2G or LAN or DIO (Optional)		
Communication Protocols	Modbus-RTU (SunSpec Compliant)		
Weight (kg)	12.8	12.8	13.4
Dimension W×H×D (mm)	410 × 350 × 143	410 × 350 × 143	410 × 350 × 143
Noise Emission (dB)	<25	<25	<25
Topology	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1
Ingress Protection Rating	IP66	IP66	IP66
DC Connector	MC4 (4 - 6mm ²)	MC4 (4 - 6mm ²)	MC4 (4 - 6mm ²)
AC Connector	Plug and play connector (Max.6 mm ²)		

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

*: Optional functions or devices are purchased separately.

*1: For Belgium Max. AC Active Power (W) : 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.

*2: For Belgium Max. AC 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.

*3: For Australia Max. Operating Altitude (m) is 3000.

Specifications and designs included in this data sheet are subject to change without notice.

Solahart Australia 1300 769 475 | solahart.com.au

Reorder code: SHDS/INVGW3,5,6_DNS3

ir4831 GoodWe DNS G3-Series 3-6kW Single Phase_March2023_v4