

GOODWE

DNS Series

3-6kW | Single Phase | 2 MPPTs

GoodWe DNS series is a perfect solution for residential installations thanks to its compact size. Manufactured for durability and longevity under modern industrial standards, the DNS series is IP65 rated so it can be mounted either indoors or outdoors. With a low start-up voltage of only 80V and the widest MPPT voltage range of 80-550V, these inverters can provide great versatility for many household systems. The GoodWe DNS series is also 30% lighter than other inverters in its class, making installation more convenient.



80V Start-up Voltage



Fanless and Noiseless



Export control



Wide Range of Mppt Voltage



Small, Light weight & Easy to install



Flexible communication methods

Technical Data	GW3000D-NS	GW4200D-NS	GW5000D-NS	GW3000T-DS	GW4200T-DS	GW5000T-DS
Input						
Max. Input Power (W) ¹¹⁸	3900	5460	6500	3900	5460	6500
Max. Input Voltage (V)	600	600	600	600	600	600
MPPT Operating Voltage Range (V)	80 ~ 550	80 ~ 550	80 ~ 550	80 ~ 550	80 ~ 550	80 ~ 550
Start-up Voltage (V)	80	80	80	80	80	80
Nominal Input Voltage (V)	360	360	360	360	360	360
Max. Input Current per MPPT (A)	11	11	11	13	13	13
Max. Short Circuit Current per MPPT (A) ⁶	13.8	13.8	13.8	16.3	16.3	16.3
Number of MPP trackers	2	2	2	2	2	2
Number of Strings per MPPT	1	1	1	1	1	1
Output						
Nominal Output Power (W) ²³	3000	4200	5000 ³	3000	4200	5000 ¹
Nominal Output Apparent Power (VA) ⁴	3000	4200	5000 ³	3000	4200	5000
Max. AC Active Power (W) ⁷	3000	4200	5000	3000	4200	5000
Max. AC Apparent Power (VA) ⁷	3000	4200	5000	3000	4200	5000
Nominal Output Voltage (V)	220 / 230	220 / 230	220 / 230	220 / 230	220 / 230	220 / 230
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	13.6	19.0	22.8	13.6	19.0	22.8
Power Factor	~ 1 (Adjustable from 0.8 leading to 0.8 lagging)					
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%	<3%
Efficiency						
Max. Efficiency	97.8%	97.8%	97.8%	97.8%	97.8%	97.8%
European Efficiency	97.5%	97.5%	97.5%	97.5%	97.5%	97.5%
Protection						
PV String Current Monitoring	-	-	-	Integrated	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Switch	Optional	Optional	Optional	Optional	Optional	Optional
DC Surge Protection	Type III	Type III	Type III	Type III (Type II Optional)		
AC Surge Protection	Type III	Type III	Type III	Type III	Type III	Type III
AFCI	-	-	-	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional	Optional	Optional	Optional
General Data						
Operating Temperature Range (°C)	-25 ~ +60	-25 ~ +60	-25 ~ +60	-25 ~ +60	-25 ~ +60	-25 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m) ⁵	4000	4000	4000	4000	4000	4000
Cooling Method	Natural Convection					
Display	LED, LCD, WLAN + APP					
Communication	WiFi, RS485 or 4G or 2G or LAN (Optional)					
Weight (kg)	13.0	13.0	13.0	13.0	13.0	13.0
Dimension (W x H x D mm)	354 x 433 x 147	354 x 433 x 147	354 x 433 x 147	354 x 433 x 147	354 x 433 x 147	354 x 433 x 147
Noise Emission (dB)	<25	<25	<25	<25	<25	<25
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1	<1	<1	<1
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65	IP65
DC Connector	MC4	MC4	MC4	MC4	MC4	MC4
AC Connector	Plug and play connector					
Country of Manufacture	China	China	China	China	China	China

*1: For Australia / New Zealand Max. Input Power (W) GW3000D-NS or GW3000T-DS is 4000, GW3600D-NS or GW3600T-DS is 4680, GW4200D-NS or GW4200T-DS is 5600, GW5000D-NS or GW5000T-DS is 6667.

*2: For CEI 0-21 Nominal Output Power GW3000T-DS or GW3000D-NS is 2700, GW3600T-DS or GW3600D-NS is 3350, GW4200T-DS or GW4200D-NS is 3800, GW5000T-DS or GW5000D-NS is 4540, GW6000T-DS or GW6000D-NS is 5450.

*3: For Australia / New Zealand Nominal Output Power (W) GW5000D-NS is 4999.

*4: For Australia / New Zealand Nominal Output Apparent Power (VA) GW5000D-NS is 4999.

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

*6: For Australia Max. Short Circuit Current per MPPT (A) please refer to 'Manufacturer declaration: short circuit current'.

*7: For Chile Max. AC Active Power (W) & Max. Output Apparent Power (VA): GW3000T-DS is 3000, GW4200T-DS is 4200, GW5000T-DS is 5000.

*8: For Brazil Max. Input Power (W), GW3000D-NS is 5400, GW4200D-NS is 7560, GW5000D-NS is 9000, GW3000T-DS is 5400, GW4200T-DS is 7560, GW5000T-DS is 9000.

*: Please visit GoodWe website for the latest certificates.