

# INDEPENDENT SOLAR SYSTEMS

## DNS Series

Dual MPPT, Single Phase



Technical Data	GW3000D-NS	GW3600D-NS	GW4200D-NS	GW5000D-NS	GW6000D-NS
<b>PV String Input Data</b>					
Max. DC Input Power (W)	3900	4680	5460	6500	7200
Max. DC Input Voltage (V)	600	600	600	600	600
MPPT Range (V)	80~550	80~550	80~550	80~550	80~550
Start-up Voltage (V)	120	120	120	120	120
MPPT Range for Full Load (V)	150-550	180-550	210-550	250-550	280~550
Nominal DC Input Voltage (V)	360	360	360	360	360
Max. Input Current (A)	11/11	11/11	11/11	11/11	11/11
Max. Short Current (A)	13.8/13.8	13.8/13.8	13.8/13.8	13.8/13.8	13.8/13.8
No. of MPP Trackers	2	2	2	2	2
No. of Input Strings per Tracker	1	1	1	1	1
<b>AC Output Data</b>					
Nominal Output Power (W)	3000* <sup>1</sup>	3680* <sup>1</sup>	4200* <sup>1</sup>	5000* <sup>1</sup>	6000* <sup>1</sup>
Max. Output Apparent Power (VA)	3000	3680	4200	5000	6000
Nominal Output Voltage (V)	220/230	220/230	220/230	220/230	220/230
Nominal Output Frequency (Hz)	50/60	50/60	50/60	50/60	50/60
Max. Output Current (A)	13.6	16	19	22.8	27.3
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Output THDi (@Nominal Output)	<3%	<3%	<3%	<3%	<3%
<b>Efficiency</b>					
Max. Efficiency	97.8%	97.8%	97.8%	97.8%	97.8%
Europe Efficiency	97.5%	97.5%	97.5%	97.5%	97.5%
<b>Protection</b>					
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated
<b>General Data</b>					
Operating Temperature Range (°C)	-25~60	-25~60	-25~60	-25~60	-25~60
Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000
Cooling	Natural Convection				
Noise (dB)	<25	<25	<25	<25	<25
User Interface	LCD & LED	LCD & LED	LCD & LED	LCD & LED	LCD & LED
Communication	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi
Weight (kg)	14	14	14	14	14.5
Size (Width*Height*Depth mm)	354*433*147	354*433*147	354*433*147	354*433*147	354*433*147
Protection Degree	IP65	IP65	IP65	IP65	IP65
Night Self Consumption (W)	<1	<1	<1	<1	<1
Topology	Transformerless				
<b>Certifications &amp; Standards</b>					
Grid Regulation	VDE-AR-N 4105, VDE0126-1-1, EN50438(PL), EN50438(SW), AS4777.2, G83, IEC61727, IEC62116, CEI 0-21, RD 1699:2011, UNE 206006 IN: 2011, UNE 206007-1 IN: 2013			VDE-AR-N 4105, VDE0126-1-1, EN50438(PL), EN50438(SW), AS4777.2, G59, IEC61727, MEA, PEA, IEC62116, CEI 0-21, RD 1699:2011, UNE 206006 IN: 2011, UNE 206007-1 IN: 2013	VDE-AR-N 4105, VDE0126-1-1, EN50438(PL), EN50438(SW), AS4777.2, G59, IEC61727, MEA, PEA, IEC62116, CEI 0-21
Safety Regulation	IEC62109-1&-2				
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN61000-4-16, EN61000-4-18, EN61000-4-29				

\*1: For CEI 0-21 Nominal Output Power GW3000D-NS is 2700, GW3680D-NS is 3350, GW4200D-NS is 3800, GW5000D-NS is 4540, GW6000D-NS is 5450.