

Smart DT Series

Dual-MPPT, Three-Phase

Technical Data	GW4000-DT	GW5000-DT	GW6000-DT	GW8000-DT	GW10KN-DT	GW12KN-DT	GW12KLN-DT	GW15KN-DT	GW17KN-DT	GW20KN-DT
■ PV String Input Data										
Max. DC Input Power(W)	5200	6500	7800	9600	12000	16800	21600	19500	22100	26000
Max. DC Input Voltage(V)	1000	1000	1000	1000	1000	1000	800	1000	1000	1000
MPPT Range (V)	200~800	200~800	200~800	200~850	200~850	200~850	200~650	200~850	200~950	200~950
Start-up Voltage (V)	180	180	180	180	180	180	200	180	180	180
MPPT Range for Full Load (V)	195~800	240~800	285~800	380~850	480~850	380~850	N/A	480~850	400~860	460~860
Nominal DC Input Voltage (V)	620	620	620	620	620	620	370	620	600	600
Max. Input Current (A)	11/11	11/11	11/11	11/11	11/11	22/11	22/22	22/11	22/22	22/22
Max. Short Current (A)	13.8/13.8	13.8/13.8	13.8/13.8	13.8/13.8	13.8/13.8	27.6/13.8	27.5/27.5	27.6/13.8	27.5/27.5	27.5/27.5
No. of MPP Trackers	2	2	2	2	2	2	2	2	2	2
No. of Input Strings per Tracker	1/1	1/1	1/1	1/1	1/1	2/1	2/2	2/1	2/2	2/2
■ AC Output Data										
Nominal Output Power (W)	4000*1	5000*1	6000*1	8000*1	10000*1	12000	12000	15000	17000	20000
Max. Output Apparent Power (VA)	4000	5000	6000	8000	10000	14000	13200	16500	19000	22000
Nominal Output Voltage (V)	400, 3L/N/PE	400, 3L/N/PE	400, 3L/N/PE	400, 3L/N/PE	400, 3L/N/PE	400, 3L/N/PE	150~300	400, 3L/N/PE	400, 3L/N/PE	400, 3L/N/PE
Nominal Output Frequency (Hz)	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Max. Output Current (A)	8.5	8.5	10	12.1	15.2	21.5	31.9	24	28.8	31.9
Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)									
Output THDi (@Nominal Output)	<2%	<2%	<2%	<2%	<2%	<2%	<3%	<2%	<3%	<3%
AC Voltage Range (V)	184~264.5	184~264.5	184~264.5	184~264.5	184~264.5	184~264.5	N/A	184~264.5	184~264.5	184~264.5
AC Frequency (Hz)	45~55	45~55	45~55	45~55	45~55	45~55	N/A	45~55	45~55	45~55
■ Efficiency										
Max. Efficiency	98.0%	98.0%	98.0%	98.3%	98.3%	98.3%	98.5%	98.3%	98.6%	98.6%
Euro Efficiency	>97.5%	>97.5%	>97.5%	>98.0%	>98.0%	>98.0%	98.1%	>98.0%	>98.1%	98.1%
■ Protection										
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC SPD Protection	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)
AC SPD Protection	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)
■ General Data										
Operating Temperature Range (°C)	-25~60	-25~60	-25~60	-25~60	-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%	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000
Cooling	Natural Convection								Fan cooling	Fan cooling
Noise (dB)	<30	<30	<30	<30	<30	<40	N/A	<40	45	45
User Interface	LCD & LED	LCD & LED	LCD & LED	LCD & LED	LCD & LED	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	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi
Weight (kg)	24	24	24	24	24	26	26	26	26	26
Size (Width*Height*Depth mm)	516*415*192	516*415*192	516*415*192	516*415*192	516*415*192	516*455*192	516*455*220	516*455*192	516*455*192	516*455*192

Protection Degree	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
Night Self Consumption (W)	<1	<1	<1	<1	<1	<1	<2	<1	<1	<2
Topology	Transformerless									

Certifications & Standards

	VDE0126-1-1 VDE-AR-N 4105 AS4777.2 EN50438(PL) EN50438(SW) EN50438(IR) G83 ERDF-NOI-RES_13E IEC61727 IEC62116 CEI 0-21	VDE0126-1-1 VDE-AR-N 4105 AS4777.2 EN50438(PL) EN50438(SW) EN50438(IR) G83 ERDF-NOI-RES_13E IEC61727 IEC62116 CEI 0-21	AS4777.2 VDE0126-1-1 VDE-AR-N 4105 EN50438 CEI 0-21	VDE0126-1-1 AS4777.2 G83 IEC61727 IEC62116 EN50438(SW) EN50438(IR) EN50438(IR)	VDE0126-1-1 AS4777.2 G83, IEC61727 IEC62116 EN50438(SW) EN50438(IR) CEI 0-21	VDE0126-1-1 EN50438(PL) VDE-AR-N 4105	VDE0126-1-1 AS4777.2 G83, IEC61727 IEC62116 EN50438(SW) EN50438(IR) CEI 0-21				
Grid Regulation								N/A			
Safety Regulation	IEC62109-1&2							N/A	IEC62109-1&2	IEC62109-1&2	IEC62109-1&2
EMC	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-4-16, EN 61000-4-18, EN 61000-4-29							N/A	EN 61000-6-1, EEN 61000-6-1, EEN 61000-6-1, EN 61000-6-2, ENN 61000-6-2, ENN 61000-6-2, EN 61000-6-3, EN 6 61000-6-3, EN 6 61000-6-3, EN 6 1000-6-4, EN 61 1000-6-4, EN 61 1000-6-4, EN 61 000-4-16, EN 61 000-4-16, EN 61 000-4-16, EN 61 000-4-18, EN 61 000-4-18, EN 61 000-4-18, EN 61 000-4-18, EN 61 000-4-29		

*: Maximum operating voltage is 950V.

*1: For CEI 0-21 Nominal Output Power GW4000-DT is 3605, GW5000-DT is 4550, GW6000-DT is 5450, GW8000-DT is 7250, GW10KN-DT is 9050.