

SDT Series Datasheet



Technical Data	GW12KN-DT	GW15KN-DT	GW17KN-DT	GW20KN-DT
PV String Input Data				
Max. DC Input Power (W)	16800	19500	22100	26000
Max. DC Input Voltage (V)	1000	1000	1000	1000
MPPT Range (V)	200~850	200~850	200~950	200~950
Start-up Voltage (V)	180	180	180	180
Nominal DC Input Voltage (V)	620	620	620	620
Max. Input Current (A)	22/11	22/11	22/22	22/22
Max. Short Current (A)	27.6/13.8	27.6/13.8	27.5/27.5	27.5/27.5
No. of MPP Trackers	2	2	2	2
No. of Input Strings per Tracker	2/1	2/1	2/2	2/2
AC Output Data				
Nominal Output Power (W)	12000	15000	17000	20000
Max. Output Power (W)	14000	16500	19000	22000
Max. Output Apparent Power (VA)	14000	16500	19000	22000
Nominal Output Voltage (V)	400, 3L/N/PE	400, 3L/N/PE	400, 3L/N/PE or 3L/PE	400, 3L/N/PE or 3L/PE
Nominal Output Frequency (Hz)	50/60	50/60	50/60	50/60
Max. Output Current (A)	21.5	24	28.8	31.9
Output Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Output THDi (@Nominal Output)	<2%	<2%	<3%	<3%
Efficiency				
Max. Efficiency	98.3%	98.3%	98.6%	98.6%
European Efficiency	>98.0%	>98.0%	>98.1%	>98.1%
Protection				
PV String current Monitoring	Integrated	Integrated	Integrated	Integrated
Anti-Islanding Protection	Integrated	Integrated	Integrated	Integrated
Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated	Integrated
Output Short Protection	Integrated	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated
DC SPD Protection	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)
AC SPD Protection	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)	Integrated (Type III)
General Data				
Operating Temperature Range (°C)	-25~60	-25~60	-25~60	-25~60
Relative Humidity	0~100%	0~100%	0~100%	0~100%
Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000
Cooling	Natural Cooling	Natural Cooling	Fan Cooling	Fan Cooling
Noise (dB)	<40	<40	45	45
User Interface	LCD & LED	LCD & LED	LCD & LED	LCD & LED
Communication	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi	RS485 or WiFi
Weight (kg)	26	26	26	26
Size (Width*Height*Depth mm)	516*455*192	516*455*192	516*455*220	516*455*220
Protection Degree	IP65	IP65	IP65	IP65
Night Self Consumption (W)	<1	<1	<1	<1
Topology	Transformerless	Transformerless	Transformerless	Transformerless
Certifications & Standards				
Grid Regulation	VDE0126-1-1, EN50438(PL),VDE-AR-N 4105, AS4777.2	VDE0126-1-1, AS4777.2, G83, IEC61727, IEC62116, EN50438(SW), EN50438(IR), 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			