GOODWE
YOUR SOLAR ENGINE



Maximize Your Power & Savings



- Compact size & lightweight
- Maximum efficiency up to 98.6%
- DC — Up to 30% DC input oversizing
- AC — 10% AC output overloading
- IP65 dustproof and waterproof

Smart DT Series

Dual-MPPT, Three-Phase

4.0kW | 5.0kW | 6.0kW | 8.0kW | 10kW | 12kW | 15kW | 20kW

The GoodWe Smart DT series inverter is specially designed for three-phase home solar systems, covering a wide power range of 4 kW, 5 kW, 6 kW, 8 kW, 10kW, 12kW, 15kW and 20kW. The integrated two MPPTs allow two-array inputs from different roof orientations. The SDT series inverter is small, light and easy to install. Suitable for both outdoor and indoor installations, this inverter offers a quiet operation thanks to its fanless, natural convection cooling.

Technical Data

		GW4000-DT	GW5000-DT	GW6000-DT	GW8000-DT	GW10KN-DT	GW12KN-DT	GW15KN-DT	GW20KN-DT
PV String Input Data	Max. DC Input Power (W)	5200	6500	7800	9600	12000	16800	19500	26000
	Max. DC Input Voltage (V)	1000	1000	1000	1000	1000	1000	1000	1000
	MPPT Range (V)	200~800	200~800	200~800	200~850	200~850	200~850	200~850	200~950
	Start-up Voltage (V)	180	180	180	180	180	180	180	180
	MPPT Range for Full Load (V)	195~800	240~800	285~800	380~850	480~850	380~850	480~850	460~860
	Nominal DC Input Voltage (V)	620	620	620	620	620	620	620	600
	Max. Input Current (A)	11/11	11/11	11/11	11/11	11/11	22/11	22/11	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	27.6/13.8	27.6/27.6
	No. of MPP Trackers	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	2/1	2/2
AC Output Data	Nominal Output Power (W)	4000*[1]	5000*[1]	6000*[1]	8000*[1]	10000*[1]	12000	15000	20000
	Max. Output Apparent Power (VA)	4000	5000	6000	8000	10000	14000	16500	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	400, 3L/N/PE	400, 3L/N/PE or 3L/PE
	Nominal Output Frequency (Hz)	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	24	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%	<2%	<3%
Efficiency	Max. Efficiency	98.0%	98.0%	98.0%	98.3%	98.3%	98.3%	98.3%	98.6%
	Euro Efficiency	>97.5%	>97.5%	>97.5%	>98.0%	>98.0%	>98.0%	>98.0%	>98.1%
Protection	PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
	Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
	Input Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
	Insulation Resistor Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
	DC SPD Protectioin	Type III	Type III	Type III	Type III	Type III	Type III	Type III	Type III
	AC SPD Protection	Type III	Type III	Type III	Type III	Type III	Type III	Type III	Type III
	Residual Current Monitoring Unit	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
	Output Over Current Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
	Output Short Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
	Output Over Voltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
General Data	Operating Temperature Range (°C)	-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%
	Operating Altitude (m)	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000	≤4000
	Cooling	Natural Convection							Fan Cooling
	Noise (dB)	<30	<30	<30	<30	<30	<40	<40	<45
	User Interface	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
	Weight (kg)	24	24	24	24	24	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*192	516*455*220
	Protection Degree	IP65	IP65	IP65	IP65	IP65	IP65	IP65	IP65
	Night Self Consumption (W)	<1	<1	<1	<1	<1	<1	<1	<1
	Topology	Transformerless							
Certifications & Standards	Grid Regulation	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, 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	
	Safety Regulation	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							

*: 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.