

SDT G3 Series

8-30kW | Three Phase | 2 MPPTs

The GoodWe SDT G3 Series, with a power range of 8-30kW, is specifically engineered to cater to the energy needs of three-phase residential and small commercial projects. The inverter boasts an impressive 150% DC oversizing and 110% AC overloading capabilities, allowing for maximum performance and output even in challenging environments. In addition, the SDT G3 Series inverter's lightweight and easy-to-install design offers exceptional convenience for operators and installers alike.



Smart Control & Monitoring

- 24/7 load consumption monitoring
- Export power limit



Superb Safety & Reliability

- Optional AFCI¹
- IP66 ingress protection
- Optional Type II SPD on both AC and DC sides¹



Friendly & Thoughtful Design

- Fanless cooling for quiet operation²
- Elegant and compact design



Flexible & Adaptable Applications

- Up to 150% DC input oversizing & 110% AC output overloading
- Max. 22A DC input current per string
- Optional PID recovery¹

Technical Data	GW8000-	GW10K-	GW10K-	GW12K-	GW15K-	GW17K-	GW20K-	GW12KLV-	GW17KLV-	GW25K-	GW30K-
	SDT-30	SDT-30	SDT-EU30	SDT-30	SDT-30	SDT-30	SDT-30	SDT-C30	SDT-C30	SDT-C30	SDT-C30
Input											
Max. Input Voltage (V)	1100						850		1100		
MPPT Operating Voltage Range (V)	140 ~ 1000						140 ~ 700		140 ~ 1000		
Start-up Voltage (V)	160										
Nominal Input Voltage (V)	600						420		600		
Max. Input Current per MPPT (A)	22			32 / 22			42 / 32		42 / 22		42 / 32
Max. Short Circuit Current per MPPT (A)	27.5			40.0 / 27.5			52.5 / 40.0		52.5 / 27.5		52.5 / 40.0
Number of MPP Trackers	2										
Number of Strings per MPPT	1			2 / 1			2		2 / 1		2
Output											
Nominal Output Power (W)	8000	10000	10000	12000	15000	17000	20000	12000	17000	25000	30000
Nominal Output Apparent Power (VA)	8000	10000	10000	12000	15000	17000	20000	12000	17000	25000	30000
Max. AC Active Power (W) ¹	8800	11000	10000	13200	16500	18700	22000	12000	17000	27500	33000
Max. AC Apparent Power (VA)	8800	11000	10000	13200	16500	18700	22000	12000	17000	27500	33000
Nominal Output Voltage (V)	220 / 380, 230 / 400, 240 / 415, 3L / N / PE or 3L / PE							127 / 220, 3L / N / PE or 3L / PE		220 / 380, 230 / 400, 240 / 415, 3L / N / PE or 3L / PE	
Output Voltage Range (V)	180 ~ 280 (according to local standard)							114 ~ 139 (according to local standard)		180 ~ 280 (according to local standard)	
Nominal AC Grid Frequency (Hz)	50 / 60						60		50 / 60		
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65						59.5 ~ 60.2		45 ~ 55 / 55 ~ 65		
Max. Output Current (A) ²	13.4	16.7	15.2	20.0	25.0	28.3	33.3	33.3	50.0	41.7	50.0
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)										
Max. Total Harmonic Distortion	<3%										
Efficiency											
Max. Efficiency	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%	98.2%	97.5%	98.6%	98.6%
European Efficiency	98.0%	98.0%	98.0%	98.2%	98.2%	98.2%	98.2%	97.2%	96.9%	98.2%	98.3%
Protection											
PV String Current Monitoring	Integrated										
PV Insulation Resistance Detection	Integrated										
Residual Current Monitoring	Integrated										
PV Reverse Polarity Protection	Integrated										
Anti-islanding Protection	Integrated										
AC Overcurrent Protection	Integrated										
AC Short Circuit Protection	Integrated										
AC Overvoltage Protection	Integrated										
DC Switch	Integrated										
DC Surge Protection	Type III (Type II Optional)						Type II		Type III (Type II Optional)		
AC Surge Protection	Type III (Type II Optional)										
AFCI	Optional										
Emergency Power Off	Optional										
Rapid Shutdown	Optional										
Remote Shutdown	Optional										
PID Recovery	Optional										
Power Supply at Night	Optional										
General Data											
Operating Temperature Range (°C)	-30 ~ +60										
Relative Humidity	0 ~ 100%										
Max. Operating Altitude (m)	4000										
Cooling Method	Natural Convection						Smart Fan Cooling				
User Interface	LED, LCD (Optional), WLAN + APP										
Communication	RS485, WiFi, LAN or 4G or Bluetooth (Optional)										
Weight (kg)	14.7	14.7	14.7	16.2	16.2	17.1	17.1	17.1	20.5	19.7	20.5
Dimension (W x H x D mm)	491 x 392 x 210						530 x 413 x 227				
Noise Emission (dB)	<30						<45				
Topology	Non isolated										
Self-consumption at Night (W)	<1										
Ingress Protection Rating	IP66										
DC Connector	MC4 (4 ~ 6mm ²)										
AC Connector	OT terminal (Max. 10mm ²)			OT terminal (Max. 16mm ²)			OT terminal (Max. 25mm ²)				

*1: For Brazil and Chile, the Max. AC Active Power (W) & Max. AC Apparent Power (VA): GW8000-SDT-30 is 8000, GW10K-SDT-30 is 10000, GW12K-SDT-30 is 12000, GW15K-SDT-30 is 15000, GW17K-SDT-30 is 17000, GW20K-SDT-30 is 20000, GW12KLV-SDT-C30 is 12000, GW17KLV-SDT-C30 is 17000, GW25K-SDT-C30 is 25000, GW30K-SDT-C30 is 30000.

*2: For Brazil and Chile, Max. Output Current (A) and Nominal Output Current (A): GW8000-SDT-30 is 12.1, GW10K-SDT-30 is 15.2, GW12K-SDT-30 is 18.2, GW15K-SDT-30 is 22.7,

GW17K-SDT-30 is 25.8, GW20K-SDT-30 is 30.3, GW12KLV-SDT-C30 is 18.2, GW17KLV-SDT-C30 is 25.8, GW25K-SDT-C30 is 37.9, GW30K-SDT-C30 is 45.5.

*: Please visit GoodWe website for the latest certificates.

*: All pictures shown are for reference only. Actual appearance may vary.