

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-SDT-30	GW10K-SDT-30	GW10K-SDT-EU30	GW12K-SDT-30	GW15K-SDT-30	GW17K-SDT-30	GW20K-SDT-30	GW12KLV-SDT-C30	GW17KLV-SDT-C30	GW25K-SDT-C30	GW30K-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 × H × D mm)	491 × 392 × 210						530 × 413 × 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)					