

GOODWE

SDT G3 Series

4-30kW | Three Phase | 2 MPPTs

The GoodWe SDT G3 Series, with a power range of 4-30kW, 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



Friendly & Thoughtful Design

- Fanless cooling for quiet operation²
- Elegant and compact design



Superb Safety & Reliability

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



Flexible & Adaptable Applications

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

¹: Optional functions or devices are purchased separately.
²: For SDT G3 4-15kW only.

Technical Data		GW4000-SDT-30	GW5000-SDT-30	GW6000-SDT-30	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) ³		1100										850		1100			
MPPT Operating Voltage Range (V) ⁴		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 (kW)		4.0	5.0	6.0	8.0	10.0	10.0	12.0	15.0	17.0	20.0	12.0	17.0	25.0	30.0		
Nominal Output Apparent Power (kVA)		4.0	5.0	6.0	8.0	10.0	10.0	12.0	15.0	17.0	20.0	12.0	17.0	25.0	30.0		
Max. AC Active Power (kW) ¹		4.4	5.5	6.6	8.8	11.0	10.0	13.2	16.5	18.7	22.0	12.0	17.0	27.5	33.0		
Max. AC Apparent Power (kVA) ¹		4.4	5.5	6.6	8.8	11.0	10.0	13.2	16.5	18.7	22.0	12.0	17.0	27.5	33.0		
Nominal Power at 40°C (kW)		4.0	5.0	6.0	8.0	10.0	10.0	12.0	15.0	17.0	20.0	12.0	17.0	25.0	30.0		
Max. Power at 40°C (Including AC Overload) (kW)		4.0	5.0	6.0	8.0	10.0	10.0	12.0	15.0	17.0	20.0	12.0	17.0	25.0	30.0		
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		6.7	8.4	10.0	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		98.4%	98.4%	98.4%	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%	98.0%	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		Integrated				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 + Bluetooth, 4G + Bluetooth (Optional)															
Communication Protocols		Modbus-RTU (SunSpec Compliant), Modbus-TCP															
Weight (kg)		14.7				16.2				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 ~ 6mm²)															
AC Connector		OT terminal (Max. 10mm²)						OT terminal (Max. 16mm²)		OT terminal (Max. 25mm²)	OT terminal (Max. 16mm²)		OT terminal (Max. 25mm²)	OT terminal (Max. 16mm²)	OT terminal (Max. 25mm²)		

*1: For Brazil and Chile, the Max. AC Active Power (kW) & Max. AC Apparent Power (kVA): GW4000-SDT-30 is 4, GW5000-SDT-30 is 5, GW6000-SDT-30 is 6, GW8000-SDT-30 is 8, GW10K-SDT-30 is 10, GW12K-SDT-30 is 12, GW15K-SDT-30 is 15, GW17K-SDT-30 is 17, GW20K-SDT-30 is 20, GW12KLV-SDT-C30 is 12, GW17KLV-SDT-C30 is 17, GW25K-SDT-C30 is 25, GW30K-SDT-C30 is 30.

*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 33.3, GW17KLV-SDT-C30 is 50, GW25K-SDT-C30 is 37.9, GW30K-SDT-C30 is 45.5.

*3: When the input voltage is 1000V-1100V, the inverter will enter standby mode. The inverter will return to normal operation state when the voltage returns to the MPPT working voltage range.

*4: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.

*5: Please visit GoodWe website for the latest certificates.

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