

GOODWE

SDT G3 Series

5-29.9kW | Three Phase | 2 MPPTs

The GoodWe SDT G3 Series, with a power range of 5-29.9kW, 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.



*The 5-20K models have slight appearance differences.



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 5-29.9kW only.

Technical Data	GW5000-SDT-AU30	GW6000-SDT-AU30	GW8000-SDT-AU30	GW9990-SDT-AU30	GW15KSDT-AU30	GW20KSDT-AU30	GW25KSDT-AU30	GW29K9-SDT-AU30
Input								
Max. Input Power (kW)	7.5	9.0	12.0	15.0	22.5	30.0	37.5	45.0
Max. Input Voltage (V) ^{*1}	1100							
MPPT Operating Voltage Range (V) ^{*2,3}	140 ~ 950							
Start-up Voltage (V)	160							
Nominal Input Voltage (V)	600							
Max. Input Current per MPPT (A)	16 / 16 / 16	16 / 16 / 16	32 / 16 / 16	32 / 16 / 16	32 / 32 / 16	32 / 32 / 16	40 / 40 / 40	40 / 40 / 40
Max. Short Circuit Current per MPPT (A)	23 / 23 / 23	23 / 23 / 23	45 / 23 / 23	45 / 23 / 23	45 / 45 / 23	45 / 45 / 23	56 / 56 / 56	56 / 56 / 56
Number of MPP Trackers	3							
Number of Strings per MPPT	1	1	2 / 1 / 1	2 / 1 / 1	2 / 2 / 1	2 / 2 / 1	2	2
Output								
Nominal Output Power (W)	5	6	8	9.99	15	20	25	29.99
Nominal Output Apparent Power (VA)	5	6	8	9.99	15	20	25	29.99
Nominal Output Voltage (V)	230 / 400, 3L / N / PE or 3L / PE							
Output Voltage Range (V)	180 ~ 260 (According to local standard)							
Nominal AC Grid Frequency (Hz)	50 / 60							
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65							
Max. Output Current (A)	7.3	8.7	11.6	14.5	21.8	29.0	37.9	45.5
Max. Output Fault Current (Peak and Duration) (A)	26 @ 6.5us	26 @ 6.5us	37 @ 6.5us	37 @ 6.5us	70 @ 6.5us	70 @ 6.5us	126 @ 6.5us	126 @ 6.5us
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%	98.6%	98.6%	98.7%	98.7%
European Efficiency	97.8%	97.8%	97.9%	97.9%	98.1%	98.3%	98.3%	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 II			
AC Surge Protection					Type II			
AFCI					Optional			
Rapid Shutdown					Optional			
Remote Shutdown					Integrated			
PID Recovery					Optional			
Power Supply at Night					Integrated			
Shadow Scanning					Integrated			
General Data								
Operating Temperature Range (°C)					-30 ~ +60			
Cooling Method					Smart Fan Cooling			
User Interface					LED, LCD (Optional), WLAN + APP			
Communication					WiFi + Lan + Bluetooth or 4G + Bluetooth (optional)			
Communication Protocols					ModbusRTU, ModbusTCP			
Weight (kg)	<20	<20	<20	<20	<20	<22	<30	<30
Dimension (W × H × D mm)	530 × 413 × 221						585 × 483 × 230	
Noise Emission (dB)	<35	<35	<35	<35	<40	<40	<45	<45
Topology					Non-isolated			
Ingress Protection Rating					IP66			
Anti-corrosion Class					C4			
Country of Manufacture					China			

*1: 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.

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

*3: The PV input voltage should be higher than the Max. MPPT Voltage at Nominal Power.

*: Please visit GoodWe website for the latest certificates.

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