

SDT G3 Series

5-29.9kW | Three Phase | 3 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 x H x D mm)	530 x 413 x 221						585 x 483 x 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.