GOODWE



SDT G3 Series

4-30kW I Three Phase I 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

Superb Safety & Reliability

- Optional AFCI[1]
- IP66 ingress protection
- Optional Type II SPD on both AC and DC sides[1]

Friendly & Thoughtful Design

- Fanless cooling for quiet operation[2]
- 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 recovery[1]

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

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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 × 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 ~ 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.

*: Please visit GoodWe website for the latest certificates.

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

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