GOODWE

SDT G3 Series

50kW I Three Phase I 4 MPPTs

The SDT G3 Series inverter, with a 50kW capacity, delivers exceptional performance. It excels in being able to operate at an ultra-low noise level of under 50dB, ensuring its suitability for a wide range of commercial and industrial (C&I) applications, especially in noise-sensitive environments, such as schools and hospitals.



High Power Generation

· 4 MPPTs, Max. efficiency 98.7%
· 20A per string & 180% PV oversizing

Cost-Effective Design

· Support aluminum cable for lower LCOE
· String-level monitoring for easy O&M

Superb Safety & Reliability

· AI-driven AFCI 3.0 for safety[1]
· Type II SPD on both AC and DC sides
· IP66 ingress protection

Friendly & Thoughtful Design

· Operate quietly at under 50dB
· Compact design for easy installation

1: Optional functions or devices are purchased separately.

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Technical Data	GW50K-SDT-C30
Input	
Max. PV Input Power (kW)	75
Max. Input Voltage (V)[*1]	1100
MPPT Operating Voltage Range (V)[*2*3]	140 ~ 1000
Start-up Voltage (V)	160
Nominal Input Voltage (V)	600
Max. Input Current per MPPT (A)	40
Max. Short Circuit Current per MPPT (A)	52
Number of MPP Trackers	4
Number of Strings per MPPT	2
Output	
Nominal Output Power (kW)	50
Nominal Output Apparent Power (kVA)	50
Nominal Output Voltage (V)	220 / 380, 230 / 400, 240 / 415, 3L / N / PE or 3L / PE
Output Voltage Range (V)	180 ~ 280 (According to local standard)
Nominal AC Grid Frequency (Hz)	50 / 60
AC Grid Frequency Range (Hz)	45 ~ 55 / 55 ~ 65
Max. Output Current (A)	75.7
Nominal Output Current (A)	75.7 @380Vac, 72.4 @400Vac, 69.4 @415Vac
Max. Output Fault Current (Peak and Duration) (A)	230 @ 4.36μs
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)
Max. Total Harmonic Distortion	<3%
Efficiency	
Max. Efficiency	98.7%
European Efficiency	98.0%
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	Optional
Shadow Scanning	Integrated
General Data	
Operating Temperature Range (°C)	-30 ~ +60
Cooling Method	Smart Fan Cooling
User Interface	LED, LCD (Optional), WLAN + APP
Communication	RS485, WiFi + LAN + Bluetooth or 4G + Bluetooth (Optional)
Communication Protocols	ModbusRTU, ModbusTCP
Weight (kg)	33
Dimension (W × H × D mm)	646 × 484 × 230
Noise Emission (dB)	<50
Topology	Non-isolated
Self-consumption at Night (W)	<1
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.

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