



SDT G3 Series

50 kW

Technical Data

GW50K-SDT-C30

Input

Max. Input Voltage (V)	1100 ^{*1}
MPPT Operating Voltage Range (V) ^{*2}	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 (W)	50000
Nominal Output Apparent Power (VA)	50000
Max. AC Active Power (W)	50000
Max. AC Apparent Power (VA)	50000
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@380Vac
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 ^{*3}	Optional
Emergency Power Off	Optional
Rapid Shutdown	Optional
Remote Shutdown	Optional
PID Recovery	Optional
Power Supply at Night	Optional
Shadow Scanning	Integrated

General Data

Operating Temperature Range (°C)	-30 ~ +60
Relative Humidity	0 ~ 100%
Max. Operating Altitude (m)	4000
Cooling Method	Smart Fan Cooling
User Interface	LED, LCD (Optional), WiFi + LAN + Bluetooth ^{*4}
Communication	RS485, WIFI + LAN + Bluetooth
Communication Protocols	Modbus-RTU (SunSpec Compliant), Modbus-TCP
Weight (kg)	33
Dimension (W x H x D mm)	646 x 484 x 230
Noise Emission (dB)	<50
Topology	Non-isolated
Self-consumption at Night (W)	<1 (Without AC SPS)
Ingress Protection Rating	IP66
DC Connector	MC4 (4 ~ 6mm ²)
AC Connector	OT / DT terminal (Max. 70mm ²)

*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: For Brazil and Colombia is Integrated.

*4: For Brazil, WiFi+Bluetooth is standard.

*: Please visit GoodWe website for the latest certificates.

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