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
Input							
Max. Input Voltage (V)[*1]	1100						
MPPT Operating Voltage Range (V)[*2]	140 ~ 1000						
Start-up Voltage (V)	160						
Nominal Input Voltage (V)	600						
Max. Input Current per MPPT (A)	22						
Max. Short Circuit Current per MPPT (A)	27.5						
Number of MPP Trackers	2						
Number of Strings per MPPT	1						
Output							
Nominal Output Power (kW)	4.0	5.0	6.0	8.0	10.0	10.0	12.0
Nominal Output Apparent Power (kVA)	4.0	5.0	6.0	8.0	10.0	10.0	12.0
Max. AC Active Power (kW)	4.4	5.5	6.6	8.8	11.0	10.0	13.2
Max. AC Apparent Power (kVA)	4.4	5.5	6.6	8.8	11.0	10.0	13.2
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)	6.7	8.4	10.0	13.4	16.7[*3]	15.2	20.0
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%
European Efficiency	97.7%	97.7%	97.7%	98.0%	98.0%	98.0%	98.2%
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)						
AC Surge Protection	Type III (Type II Optional)						
AFCI	Optional						
Rapid Shutdown	Optional						
Remote Shutdown	Integrated						
PID Recovery	Optional						
Power Supply at Night	Optional						
General Data							
Operating TemperatureRange (°C)	-30 ~ +60						
Relative Humidity	0 ~ 100%						
Max. Operating Altitude (m)	4000						
Cooling Method	Natural Convection						
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)	15.1	15.1	15.1	15.1	15.1	15.1	16.6
Dimension (W × H × D mm)	491 × 392 × 210						
Noise Emission (dB)	<30						
Topology	Non-isolated						
Self-consumption at Night (W)	<1						
Ingress Protection Rating	IP66						
DC Connector	MC4 (4 ~ 6mm²)						
AC Connector	OT / DT terminal (Max. 10mm²)						OT / DT terminal (Max. 16mm²)

*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 Jordan, Max. Output Current is 16A.
*: Please visit GoodWe website for the latest certificates.

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Technical Data	GW15K-SDT-30	GW17K-SDT-30	GW20K-SDT-30	GW20K-SDT-31	GW25K-SDT-C30	GW25K-SDT-30	GW25K-SDT-P31
Input							
Max. Input Voltage (V)[*1]				1100			
MPPT Operating Voltage Range (V)[*2]				140 ~ 1000			
Start-up Voltage (V)				160			
Nominal Input Voltage (V)				600			
Max. Input Current per MPPT (A)	22	32 / 22	32 / 22	40 / 40	42 / 22	40 / 40 / 40	40 / 40
Max. Short Circuit Current per MPPT (A)	27.5	40 / 27.5	40 / 27.5	52.5 / 52.5	52.5 / 27.5	50 / 50 / 50	52.5 / 52.5
Number of MPP Trackers	2	2	2	2	2	3	2
Number of Strings per MPPT	1	2 / 1	2 / 1	2 / 2	2 / 1	2	2 / 2
Output							
Nominal Output Power (kW)	15.0	17.0	20.0	20.0	25.0	25.0	25.0
Nominal Output Apparent Power (kVA)	15.0	17.0	20.0	20.0	25.0	25.0	25.0
Max. AC Active Power (kW)	16.5	18.7	22.0	22.0[*3]	27.5	25.0	27.5[*3]
Max. AC Apparent Power (kVA)	16.5	18.7	22.0	22.0[*3]	27.5	25.0	27.5[*3]
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)	25.0	28.3	33.3	30.3	41.7	37.9	37.9
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%	98.7%	98.5%
European Efficiency	98.2%	98.2%	98.2%	97.9%	98.2%	98.3%	97.9%
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)					Type II	Type III (Type II Optional)
AFCI				Optional			
Rapid Shutdown				Optional			
Remote Shutdown				Integrated			
PID Recovery				Optional			
Power Supply at Night				Optional			
General Data							
Operating TemperatureRange (°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			Modbus RTU, Modbus TCP	Modbus-RTU (SunSpec Compliant), Modbus-TCP	Modbus RTU, Modbus TCP	
Weight (kg)	16.6	18.8	18.8	16.6	20.8	30.0	17.7
Dimension (W × H × D mm)	491 × 392 × 210	530 × 413 × 227				585 × 483 × 230	530 × 413 × 221
Noise Emission (dB)	<30	<45	<45	<45	<45	<45	<45
Topology	Non-isolated						
Self-consumption at Night (W)	<1						
Ingress Protection Rating	IP66						
DC Connector	MC4 (4 ~ 6mm²)						
AC Connector	OT / DT terminal (Max. 16mm²)	OT terminal (Max. 25mm²)	OT / DT terminal (Max. 16mm²)			OT terminal (Max. 25mm²)	OT / DT terminal (Max. 16mm²)

*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 Sri Lanka, Max. AC Active Power and Max. AC Apparent Power are same as Nominal Output Power.
*: Please visit GoodWe website for the latest certificates.

SDT G3 Series

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Technical Data	GW12KLV-SDT-C31	GW12KLV-SDT-C30	GW17KLV-SDT-C30	GW23KLV-SDT-BR30	GW30KLV-SDT-C30
Input					
Max. Input Voltage (V)*1			850		
MPPT Operating Voltage Range (V)*2			140 ~ 700		
Start-up Voltage (V)			160		
Nominal Input Voltage (V)			420		
Max. Input Current per MPPT (A)	40 / 40	32 / 22	42 / 32	42 / 42 / 32	40 / 40 / 40 / 40
Max. Short Circuit Current per MPPT (A)	52.5 / 52.5	40.0 / 27.5	52.5 / 40.0	52.5 / 52.5 / 40.0	52 / 52 / 52 / 52
Number of MPP Trackers	2	2	2	3	4
Number of Strings per MPPT	2/2	2/1	2	2	2
Output					
Nominal Output Power (kW)	12.0	12.0	17.0	23.0	30.0
Max. AC Active Power (kW)	13.2	13.2	18.7	25.3	33.0
Max. AC Apparent Power (kVA)	13.2	13.2	18.7	25.3	33.0
Nominal Output Voltage (V)			127 / 220, 3L / N / PE or 3L / PE		
Output Voltage Range (V)			114 ~ 139 (according to local standard)		
Nominal AC Grid Frequency (Hz)			60		
AC Grid Frequency Range (Hz)			59.5 ~ 60.2		
Max. Output Current (A)	31.5	33.3	50.0	60.4	78.8
Power Factor			~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion			<3%		
Efficiency					
Max. Efficiency	98.2%	98.2%	97.5%	97.8%	98.0%
European Efficiency	97.2%	97.2%	96.9%	97.0%	97.1%
Protection					
PV String Current Monitoring			Integrated		
PV Insulation Resistance Detection			Integrated		
Residual Current Monitoring			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 III (Type II Optional)		Type II
AFCI			Optional		
Rapid Shutdown			Optional		
Remote Shutdown			Integrated		
PID Recovery			Optional		
Power Supply at Night			Optional		
General Data					
Operating TemperatureRange (°C)			-30 ~ +60		
Relative Humidity			0 ~ 100%		
Cooling Method			Smart Fan Cooling		
User Interface			LED, LCD (Optional), WLAN + APP		
Communication			RS485, WiFi + LAN + Bluetooth, 4G + Bluetooth (Optional)		
Communication Protocols			Modbus RTU, Modbus TCP		
Weight (kg)	16.6	18.8	21.1	28.0	33.0
Dimension (W × H × D mm)			530 × 413 × 221		
Noise Emission (dB)	<45	<45	<45	<45	<50
Topology			Non-isolated		
Self-consumption at Night (W)			<1		
Ingress Protection Rating			IP66		
DC Connector			MC4 (4 ~ 6mm²)		
AC Connector	OT / DT terminal (Max. 16mm²)	OT / DT terminal (Max. 16mm²)	OT / DT terminal (Max. 16mm²)	OT / DT terminal (Max. 35mm²)	OT / DT terminal (Max. 70mm²)

*1: When the input voltage is 700V-850V, 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.
*: Please visit GoodWe website for the latest certificates.