

GOODWE

SDT G2 PLUS+ SERIES

4-20kW | Three Phase

2 MPPTS

The GoodWe 4-20kW SDT G2 PLUS+ Series inverter is specially designed for three-phase residential and small commercial projects. The integrated features of high efficiency allow for optimized power generation during the inverter's service cycle. With its lightweight and easy-to-install design, the SDT G2 inverter offers comfort and great convenience for operators and installers. Users can also take all-around smart control of energy management utilizing the featuring 24-hour load consumption monitoring enabled by GoodWe HK3000**1. Meet the perfect choice of maximum energy yield for residential and small-scale commercial usage.



Smart Control & Monitoring

- Smart Shadow Scan with adjustable scan interval**1
- Multi-protocol compatibility for smart home integration



High Generation to Cut Bills

- Up to 200% DC input oversizing & 110% AC output overloading
- Up to 16 A max. DC input current per string



Superb Safety & Reliability

- Optional AFCI**2
- Optional exchangeable DC Type II SPD & SPD failure alarm**2



Friendly & Thoughtful Design

- Fanless design for quiet operations**3
- Elegant and compact design

SDT G2 PLUS+ SERIES



| Technical Data | GW4000-SDT-20 | GW5000-SDT-20 | GW6000-SDT-20 | GW8000-SDT-20 | GW10K-SDT-20 | GW12K-SDT-20 | GW12KLV-SDT-20 | GW15K-SDT-20 | GW17K-SDT-20 | GW20K-SDT-20 | |
|--|---|---------------|---------------|------------------------------|--------------|-------------------|------------------------|------------------------------|--------------|--------------|--|
| Input | | | | | | | | | | | |
| Max. Input Voltage (V) | 1000 | 1000 | 1000 | 1100 | 1100 | 1100 | 800 | 1100 | 1100 | 1100 | |
| MPPT Operating Voltage Range (V) | 180 ~ 850 | 180 ~ 850 | 180 ~ 850 | 140 ~ 950 | 140 ~ 950 | 140 ~ 950 | 140 ~ 650 | 140 ~ 950 | 140 ~ 950 | 140 ~ 950 | |
| Start-up Voltage (V) | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | 180 | |
| Nominal Input Voltage (V) | 620 | 620 | 620 | 620 | 620 | 620 | 370 | 620 | 620 | 620 | |
| Max. Input Current per MPPT (A) | 16 | 16 | 16 | 15 | 15 | 30 | 30 | 30 | 30 | 30 | |
| Max. Short Circuit Current per MPPT (A) | 20.0 | 20.0 | 20.0 | 18.7 | 18.7 | 37.5 | 37.5 | 37.5 | 37.5 | 37.5 | |
| Number of MPP trackers | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| Number of Strings per MPPT | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | |
| Output | | | | | | | | | | | |
| Nominal Output Power (W) | 4000 | 5000 | 6000 | 8000 | 10000 | 12000 | 12000 | 15000 | 17000 | 20000 | |
| Nominal Output Apparent Power (VA) | 4000 | 5000 | 6000 | 8000 | 10000 | 12000 | 12000 | 15000 | 17000 | 20000 | |
| Max. AC Active Power (W) ¹ | 4400 | 5500 | 6600 | 8800 | 11000 | 13200 | 12000 | 16500 | 18700 | 22000 | |
| Max. AC Apparent Power (VA) ¹ | 4400 | 5500 | 6600 | 8800 | 11000 | 13200 | 12000 | 16500 | 18700 | 22000 | |
| Nominal Output Voltage (V) | 400, 3L / N / PE | | | 380 / 400 / 415, 3L / N / PE | | | 220 / 127, 3L / N / PE | 380 / 400 / 415, 3L / N / PE | | | |
| Output Voltage Range (V) (according to local standard) | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | 180 ~ 270 | |
| Nominal AC Grid Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 | 60 | 50 / 60 | 50 / 60 | 50 / 60 | |
| AC Grid Frequency Range (Hz) | 45 ~ 55 / 55 ~ 65 | | | | | | | | | | |
| Max. Output Current (A) | 6.4 | 8.0 | 9.6 | 12.8 | 16.0 | 19.1 | 31.9 | 24.0 | 27.1 | 32.0 | |
| Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | | | | | | | | | |
| Max. Total Harmonic Distortion | <3% | <3% | <3% | <3% | <3% | <3% | <3% | <3% | <3% | <3% | |
| Efficiency | | | | | | | | | | | |
| Max. Efficiency | 98.2% | 98.2% | 98.2% | 98.3% | 98.3% | 98.4% | 96.9% | 98.4% | 98.4% | 98.4% | |
| European Efficiency | 97.6% | 97.6% | 97.6% | 97.6% | 97.6% | 97.8% | 96.4% | 97.8% | 97.8% | 97.8% | |
| Protection | | | | | | | | | | | |
| PV Insulation Resistance Detection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| Residual Current Monitoring | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| PV Reverse Polarity Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| Anti-islanding Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| AC Overcurrent Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| AC Short Circuit Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| AC Overvoltage Protection | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| DC Switch | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | Integrated | |
| DC Surge Protection | Type III (Type II Optional) | | | | | | | | | | |
| AC Surge Protection | Type III | | | Type III (Type II Optional) | | | | | | | |
| AFCI | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | |
| Emergency Power Off | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | |
| Remote Shutdown | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | |
| General Data | | | | | | | | | | | |
| Operating Temperature Range (°C) | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | -30 ~ +60 | |
| Relative Humidity | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | 0 ~ 100% | |
| Max. Operating Altitude (m) ² | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | |
| Cooling Method | Natural Convection | | | | | Smart Fan Cooling | | | | | |
| Display | LED, LCD (Optional), WLAN + APP | | | | | | | | | | |
| Communication | WiFi, RS485 or LAN or 4G (Optional) | | | | | | | | | | |
| Weight (kg) | 15.0 | 15.0 | 15.0 | 20.5 | 20.5 | 23.5 | 26.0 | 26.0 | 26.0 | 26.0 | |
| Dimension (W x H x D mm) | 354 x 433 x 147 | | | 415 x 511 x 175 | | | 415 x 511 x 198 | | | | |
| Noise Emission (dB) | <34 | <34 | <34 | <25 | <25 | <50 | <50 | <50 | <50 | <50 | |
| Topology | Non-isolated | | | | | | | | | | |
| Self-consumption at Night (W) | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | <1 | |
| Ingress Protection Rating | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | IP65 | |
| DC Connector | MC4 (4 ~ 6mm ²) | | | | | | | | | | |
| AC Connector | Plug and play connector | | | | OT Terminal | | | | | | |