


Smart Control \& Monitoring
Smart Shadow Scan with adjustable scan interval" ${ }^{\text {"1 }}$ Multi-protocol compatibility for smart home integration

Superb Safety \& Reliability
Optional AFCl" ${ }^{* 2}$
Optional exchangeable DC Type II SPD \& SPD failure alarm" ${ }^{2}$

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

## Friendly \& Thoughtful Design

Fanless design for quiet operations ${ }^{* 3}$
Elegant and compact design

| Technical Data | $\begin{aligned} & \text { GW4000- } \\ & \text { SDT-20 } \end{aligned}$ | GW5000-SDT-20 | $\begin{aligned} & \text { GW6000- } \\ & \text { SDT-20 } \end{aligned}$ | $\begin{gathered} \text { GW8000- } \\ \text { SDT-20 } \end{gathered}$ | GW10K-SDT-20 | $\begin{aligned} & \text { GW12K- } \\ & \text { SDT-20 } \end{aligned}$ | $\begin{aligned} & \text { GW12KLV- } \\ & \text { SDT-20 } \end{aligned}$ | GW15K-SDT-20 | GW17K-SDT-20 | GW20K-SDT-20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Input |  |  |  |  |  |  |  |  |  |  |
| Max.Input Voltage (V) | 1,000 | 1,000 | 1,000 | 1,100 | 1,100 | 1,100 | 800 | 1,100 | 1,100 | 1,100 |
| 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 | 20 | 20 | 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) ${ }^{2}$ | 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, <br> 3L/N/PE | 380/400/415, 3L/N/PE |  |  |
| Nominal AC Grid Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50/60 | 50/60 | 50/60 | 60 | 50/60 | 50/60 | 50/60 |
| 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 | $\sim 1$ (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 | egrated | Integrated | grated | Integrated | grated | Integrated | grated | 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 | Optional | Optional | Optional | 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) |  |  |  |  |  |  |
| AFCl | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| Emergency Power Off | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional | Optional |
| Rapid Shutdown | 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 ( ${ }^{\circ} \mathrm{C}$ ) | -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) ${ }^{\text {+3}}$ | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 | 4000 |
| Cooling Method | Natural Convection |  |  |  |  | Smart Fan Cooling |  |  |  |  |
| Display | LED, LCD(Optional, WLAN+APP |  |  |  |  |  |  |  |  |  |
| Communication | RS485, WiFi 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 $\mathrm{W} \times \mathrm{H} \times \mathrm{D}(\mathrm{mm}$ ) | $354 \times 433 \times 147$ |  |  | $415 \times 511 \times 175$ |  | $415 \times 511 \times 198$ |  |  |  |  |
| Noise Emission (dB) | <34 | <34 | <34 | <25 | <25 | <45 | $<45$ | <45 | $<45$ | $<45$ |
| 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 (4~6mm²) |  |  |  |  |  |  |  |  |  |
| AC Connector | Plug and play connector |  |  | OT Terminal |  |  |  |  |  |  |
| *1: For Belgium Max. AC Active Power (W): GW4000-SDT-20 is 4000,GW5000-SDT-20 is 5000,GW6000-SDT-20 is 6000, GW8000-SDT-20 is 8000 , GW10K-SDT-20 is 10000 , GW12K-SDT-20 is 12000, GW12KLV-SDT-20 is 12000 , GW15K-SDT-20 is 15000 , GW17K-SDT-20 is 17000, GW20K-SDT-20 is 20000; <br> *2: For Belgium Max. Output Apparent Power (VA): GW4000-SDT-20 is 4000, GW5000-SDT-20 is 5000 ,GW6000-SDT-20 is 6000, GW8000-SDT-20 is 8000 , GW10K-SDT-20 is 10000 , GW12K-SDT-20 is $12000, G W 12 K L V-$ SDT-20 is 12000, GW15K-SDT-20 is 15000, GW17K-SDT-20 is 17000, GW2OK-SDT-20 is 20000; <br> *3:For Australia Max. Operating Altitude $(\mathrm{m})$ is 3000 ; <br> **1: For SDT G2 Plus $+8-20 \mathrm{~kW}$ only. <br> **2: Optional functions or devices are purchased separately. <br> **3: For SDT G2 Plus+ 4-10kW only. <br> *:All pictures shown are for reference only. Actual appearance may vary. |  |  |  |  |  |  |  |  |  |  |

