

# GOODWE

## Maximised energy yield for high-power PV rooftops

- ✓ Maximised energy output
- ✓ Smart and silent operation
- ✓ Modern and compact design
- ✓ Highest safety standards

A perfect fit for three-phase residential and small commercial systems with high-power PV modules, the SDT G3 inverters allow for high current input. The inverters are designed for silent operation, while the optional Type II surge protection on both AC and DC sides enhances overall safety. Smart energy management including load control and 24-hour load consumption monitoring can be facilitated by adding GoodWe accessories.

 Increased yield (110% AC power)

 Optional AFCI 3.0 function

 Smart energy management



| Technical Data                                            | GW4000-SDT-30                                            | GW5000-SDT-30 | GW6000-SDT-30 | GW8000-SDT-30 | GW10K-SDT-EU30 | GW12K-SDT-30             | GW15K-SDT-30 | GW17K-SDT-30             | GW20K-SDT-30             |
|-----------------------------------------------------------|----------------------------------------------------------|---------------|---------------|---------------|----------------|--------------------------|--------------|--------------------------|--------------------------|
| Input                                                     |                                                          |               |               |               |                |                          |              |                          |                          |
| Max. Input Voltage (V) <sup>*1</sup>                      | 1100                                                     |               |               |               |                |                          |              |                          |                          |
| MPPT Operating Voltage Range (V) <sup>*2</sup>            | 140 ~ 1000                                               |               |               |               |                |                          |              |                          |                          |
| Start-up Voltage (V)                                      | 160                                                      |               |               |               |                |                          |              |                          |                          |
| Nominal Input Voltage (V)                                 | 600                                                      |               |               |               |                |                          |              |                          |                          |
| Max. Input Current per MPPT (A)                           | 22                                                       |               |               |               |                |                          |              | 32 / 22                  |                          |
| Max. Short Circuit Current per MPPT (A)                   | 27.5                                                     |               |               |               |                |                          |              | 40.0 / 27.5              |                          |
| Number of MPP Trackers                                    | 2                                                        |               |               |               |                |                          |              |                          |                          |
| Number of Strings per MPPT                                | 1                                                        |               |               |               |                |                          |              | 2 / 1                    |                          |
| Output                                                    |                                                          |               |               |               |                |                          |              |                          |                          |
| Nominal Output Power (kW)                                 | 4.0                                                      | 5.0           | 6.0           | 8.0           | 10.0           | 12.0                     | 15.0         | 17.0                     | 20                       |
| Nominal Output Apparent Power (kVA)                       | 4.0                                                      | 5.0           | 6.0           | 8.0           | 10.0           | 12.0                     | 15.0         | 17.0                     | 20                       |
| Max. AC Active Power (kW)                                 | 4.4                                                      | 5.5           | 6.6           | 8.8           | 10.0           | 13.2                     | 16.5         | 18.7                     | 22                       |
| Max. AC Apparent Power (kVA)                              | 4.4                                                      | 5.5           | 6.6           | 8.8           | 10.0           | 13.2                     | 16.5         | 18.7                     | 22                       |
| Nominal Output Voltage (V)                                | 220 / 380, 230 / 400, 240 / 415, 3L / N / PE or 3L / PE  |               |               |               |                |                          |              |                          |                          |
| Output Voltage Range (V)<br>(according to local standard) | 180 ~ 280                                                |               |               |               |                |                          |              |                          |                          |
| 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          | 15.2           | 20.0                     | 25.0         | 28.3                     | 33.3                     |
| 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%        | 98.5%                    | 98.5%                    |
| European Efficiency                                       | 98.0%                                                    | 98.0%         | 98.0%         | 98.0%         | 98.0%          | 98.2%                    | 98.2%        | 98.2%                    | 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                                                 |               |               |               |                |                          |              |                          |                          |
| Remote Shutdown                                           | Integrated                                               |               |               |               |                |                          |              |                          |                          |
| PID Recovery                                              | Optional                                                 |               |               |               |                |                          |              |                          |                          |
| Power Supply at Night                                     | Integrated                                               |               |               | Optional      |                |                          |              |                          |                          |
| General Data                                              |                                                          |               |               |               |                |                          |              |                          |                          |
| Operating Temperature Range (°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               |               |               |               |                |                          |              |                          |                          |
| Weight (kg)                                               | 14.7                                                     | 14.7          | 14.7          | 14.7          | 14.7           | 16.2                     | 16.2         | 17.1                     | 17.1                     |
| Dimension (W × H × D mm)                                  | 491 × 392 × 210                                          |               |               |               |                |                          |              | 530 × 413 × 227          |                          |
| Noise Emission (dB)                                       | <30                                                      |               |               |               |                |                          |              | <45                      |                          |
| Topology                                                  | Non isolated                                             |               |               |               |                |                          |              |                          |                          |
| Self-consumption at Night (W)                             | <1                                                       |               |               |               |                |                          |              |                          |                          |
| Ingress Protection Rating                                 | IP66                                                     |               |               |               |                |                          |              |                          |                          |
| DC Connector                                              | MC4 (4 ~ 6mm²)                                           |               |               |               |                |                          |              |                          |                          |
| AC Connector                                              | OT terminal (Max. 10mm²)                                 |               |               |               |                | OT terminal (Max. 16mm²) |              | OT terminal (Max. 25mm²) | OT 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.

\*: Please visit GoodWe website for the latest certificates.