

**GOODWE**

# DNS G3 Series

3-6kW | Single Phase  
2 MPPTs

The GoodWe DNS G3 series inverter is designed for single-phase residential applications. Integrated with high-current input and DC input oversizing capabilities, the DNS G3 provides optimised power generation and substantial return on investment. With its lighter and fanless compact design, the DNS G3 inverter provides a reliable power supply that runs at a super quiet operation of less than 25dB. The inverter also takes safety measures including optional Arc Fault Current Interrupter (AFCI) and Type II Surge Protection Device (SPD) on both sides to protect the system from electrical fire and lightning hazards in extreme environments, for guaranteed safety.



## Smart Control & Monitoring

24/7 load consumption monitoring\*  
Multiple communication protocols supported



## Optimal Generation

Max. 16A input current per string  
150% DC input oversizing & 110% AC output overloading



## Superb Safety & Reliability

Optional AFCI preventing electrical fires\*  
Optional AC & DC Type II SPD & SPD failure alarm\*



## Friendly & Thoughtful Design

IP66 ingress protection  
Low noise level thanks to fanless cooling

| Technical Data                           | GW3000-DNS-30   | GW3600-DNS-30               | GW4200-DNS-30               | GW5000-DNS-30               | GW6000-DNS-30               |
|--|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| <b>Input</b>                             |   |                             |                             |                             |                             |
| Max. Input Power (W)                     | 4500  | 5400                        | 6300                        | 7500                        | 9000                        |
| Max. Input Voltage (V)                   | 600   | 600                         | 600                         | 600                         | 600                         |
| MPPT Operating Voltage Range (V)         | 40 ~ 560  | 40 ~ 560                    | 40 ~ 560                    | 40 ~ 560                    | 40 ~ 560                    |
| Start-up Voltage (V)                     | 50  | 50                          | 50                          | 50                          | 50                          |
| Nominal Input Voltage (V)                | 360   | 360                         | 360                         | 360                         | 360                         |
| Max. Input Current per MPPT (A)          | 16  | 16                          | 16                          | 16                          | 16                          |
| Max. Short Circuit Current per MPPT (A)  | 23  | 23                          | 23                          | 23                          | 23                          |
| Number of MPP Trackers                   | 2   | 2                           | 2                           | 2                           | 2                           |
| Number of Strings per MPPT               | 1   | 1                           | 1                           | 1                           | 1                           |
| PV Input Operating Voltage Range         | 40 ~ 600  | 40 ~ 600                    | 40 ~ 600                    | 40 ~ 600                    | 40 ~ 600                    |
| <b>Output</b>                            |   |                             |                             |                             |                             |
| Nominal Output Power (W)                 | 3000  | 3600                        | 4200 <sup>1</sup>           | 5000                        | 6,000                       |
| Nominal Output Apparent Power (VA)       | 3000  | 3600                        | 4200 <sup>1</sup>           | 5000                        | 6,000                       |
| Max. AC Active Power (W) <sup>2</sup>    | 3300  | 3960                        | 4620 <sup>1</sup>           | 5500                        | 6,600                       |
| Max. AC Apparent Power (VA) <sup>3</sup> | 3300  | 3960                        | 4620 <sup>1</sup>           | 5500                        | 6,600                       |
| Nominal Output Voltage (V)               | 220 / 230 / 240   | 220 / 230 / 240             | 220 / 230 / 240             | 220 / 230 / 240             | 220 / 230 / 240             |
| Nominal AC Grid Frequency (Hz)           | 50 / 60   | 50 / 60                     | 50 / 60                     | 50 / 60                     | 50/60                       |
| Max / Rated Output Current(A)            | 14.4  | 17.3                        | 20.1                        | 24                          | 28.8                        |
| Power Factor                             | ~1 (Adjustable from 0.8 leading to 0.8 lagging)                   |                             |                             |                             |                             |
| Max. Total Harmonic Distortion           | <3%   | <3%                         | <3%                         | <3%                         | <3%                         |
| <b>Efficiency</b>                        |   |                             |                             |                             |                             |
| Max. Efficiency                          | 97.9%   | 97.9%                       | 97.9%                       | 97.9%                       | 97.9%                       |
| European Efficiency                      | 97.0%   | 97.0%                       | 97.2%                       | 97.3%                       | 97.4%                       |
| <b>Protection</b>                        |   |                             |                             |                             |                             |
| PV String Current Monitoring             | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| PV Insulation Resistance Detection       | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| Residual Current Monitoring              | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| PV Reverse Polarity Protection           | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| Anti-islanding Protection                | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| AC Overcurrent Protection                | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| AC Short Circuit Protection              | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| AC Overvoltage Protection                | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| DC Switch                                | Integrated  | Integrated                  | Integrated                  | Integrated                  | Integrated                  |
| DC Surge Protection                      | Type III (Type II Optional)                                       |                             |                             |                             |                             |
| AC Surge Protection                      | Type III (Type II Optional)                                       |                             |                             |                             |                             |
| AFCI                                     | Optional  | Optional                    | Optional                    | Optional                    | Optional                    |
| <b>General Data</b>                      |   |                             |                             |                             |                             |
| Operating Temperature Range (°C)         | -25 ~ +60   | -25 ~ +60                   | -25 ~ +60                   | -25 ~ +60                   | -25 ~ +60                   |
| Relative Humidity                        | 0 ~ 100%  | 0 ~ 100%                    | 0 ~ 100%                    | 0 ~ 100%                    | 0 ~ 100%                    |
| Max. Operating Altitude (m)              | 3000  | 3000                        | 3000                        | 3000                        | 3000                        |
| Cooling Method                           | Natural Convection  |                             |                             |                             |                             |
| User Interface                           | LED, LCD (Optional), WLAN + APP                                   |                             |                             |                             |                             |
| Communication                            | WiFi, RS485 or LAN or 4G or DI (Ripple Control or DRM) (Optional) |                             |                             |                             |                             |
| Communication Protocols                  | Modbus-RTU (SunSpec Compliant)                                    |                             |                             |                             |                             |
| Weight (kg)                              | 12.8  | 12.8                        | 12.8                        | 12.8                        | 13.4                        |
| Dimension (W x H x D mm)                 | 350 x 410 x 143   | 350 x 410 x 143             | 350 x 410 x 143             | 350 x 410 x 143             | 350 x 410 x 143             |
| Noise Emission (dB)                      | <25   | <25                         | <25                         | <25                         | <25                         |
| Topology                                 | Non-isolated  | Non-isolated                | Non-isolated                | Non-isolated                | Non-isolated                |
| Self-consumption at Night (W)            | <1  | <1                          | <1                          | <1                          | <1                          |
| Ingress Protection Rating                | IP66  | IP66                        | IP66                        | IP66                        | IP66                        |
| DC Connector                             | MC4 (4 ~ 6mm <sup>2</sup> )                                       | MC4 (4 ~ 6mm <sup>2</sup> ) | MC4 (4 ~ 6mm <sup>2</sup> ) | MC4 (4 ~ 6mm <sup>2</sup> ) | MC4 (4 ~ 6mm <sup>2</sup> ) |
| AC Connector                             | Plug and play connector (Max.6mm <sup>2</sup> )                   |                             |                             |                             |                             |
| Country of Manufacture                   | China   | China                       | China                       | China                       | China                       |

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

\*: Optional functions or devices are purchased separately.

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

\*1: For Malaysia GW4200-DNS-30: Nominal Output Power (W) and Nominal Output Apparent Power (VA) and Max. AC Active Power (W) and Max. AC Apparent Power (VA) is 4000.

\*2: For Belgium Max. AC Active Power (W): GW3000-DNS-30 is 3000, GW3600-DNS-30 is 3600, GW4200-DNS-30 is 4200, GW5000-DNS-30 is 5000, GW6000-DNS-30 is 6000.

\*3: For Belgium Max. AC Apparent Power (VA): GW3000-DNS-30 is 3000, GW3600-DNS-30 is 3600, GW4200-DNS-30 is 4200, GW5000-DNS-30 is 5000, GW6000-DNS-30 is 6000.