

## UT Series

320/350kW | Three Phase | 12/15 MPPTs

The UT 1500V Series (320/350kW) is GoodWe's new three-phase string inverter designed to increase the profitability of utility-scale projects. Offering options of 12 MPPTs and 15 MPPTs, this series comes with a maximum string input current of 15/20A, thus supporting bifacial 182mm/210mm module access. The Anti-PID (Potential Induced Degradation) and PID-recovery functions are available to mitigate and recover from PID effects. Moreover, designed for harsh outdoor environments, the UT inverter is built to withstand extreme temperatures, with a wide operating range of -35°C to +60°C. With enhanced safety, optimal LCOE, and ensured cost-effectiveness, the high-performance UT inverter provides a future-ready solution for utility-scale PV projects.



### Higher Yields

- 20A max. DC input current per string<sup>1</sup>
- Anti-PID and PID recovery



### Lower Costs

- Reactive power compensation at night
- High-speed Power Line Communication (HPLC) for reduced wiring costs



### Superb Safety & Reliability

- IP66 and optional C5 protection
- Full power operation at high temperatures: 350kW@40°C, 320kW@45°C



### Grid Friendly

- Stable operation under weak grid conditions: SCR<sub>≥</sub>1.2
- Dynamic reactive power response <30ms

| Technical Data                              | GW320K-UT | GW320KH-UT | GW350K-UT                                       | GW350KH-UT |
|---------------------------------------------|-----------|------------|-------------------------------------------------|------------|
| <b>Input</b>                                |           |            |                                                 |            |
| Max. Input Voltage (V)                      |           |            | 1500                                            |            |
| MPPT Operating Voltage Range (V)            |           |            | 480 ~ 1500                                      |            |
| Start-up Voltage (V)                        |           |            | 500                                             |            |
| Nominal Input Voltage (V)                   |           |            | 1160                                            |            |
| Max. Input Current per MPPT (A)             | 30        | 40         | 30                                              | 40         |
| Max. Short Circuit Current per MPPT (A)     | 50        | 60         | 50                                              | 60         |
| Number of MPP Trackers                      | 15        | 12         | 15                                              | 12         |
| Number of Strings per MPPT                  |           |            | 2                                               |            |
| <b>Output</b>                               |           |            |                                                 |            |
| Nominal Output Power (kW)                   | 320       | 320        | 352                                             | 352        |
| Nominal Output Apparent Power (kVA)         | 320       | 320        | 352                                             | 352        |
| Max. AC Active Power (kW)                   | 352       | 352        | 352                                             | 352        |
| Max. AC Apparent Power (kVA)                | 352       | 352        | 352                                             | 352        |
| Nominal Output Voltage (V)                  |           |            | 800, 3L / PE                                    |            |
| Output Voltage Range (V)                    |           |            | 640~920                                         |            |
| Nominal AC Grid Frequency (Hz)              |           |            | 50 / 60                                         |            |
| AC Grid Frequency Range (Hz)                |           |            | 45 ~ 55 / 55 ~ 65                               |            |
| Max. Output Current (A)                     |           |            | 254                                             |            |
| Power Factor                                |           |            | ~1 (Adjustable from 0.8 leading to 0.8 lagging) |            |
| Max. Total Harmonic Distortion <sup>1</sup> |           |            | <1%                                             |            |
| <b>Efficiency</b>                           |           |            |                                                 |            |
| Max. Efficiency                             |           |            | 99.01%                                          |            |
| European Efficiency                         |           |            | 98.80%                                          |            |
| <b>Protection</b>                           |           |            |                                                 |            |
| PV String Current Monitoring                |           |            | Integrated                                      |            |
| Internal Humidity 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 II                                         |            |
| AC Surge Protection                         |           |            | Type II                                         |            |
| AFCI                                        |           |            | Optional                                        |            |
| Anti-PID                                    |           |            | Integrated                                      |            |
| PID Recovery                                |           |            | Integrated                                      |            |
| Reactive Power Compensation at Night        |           |            | Integrated                                      |            |
| Power Supply at Night                       |           |            | Integrated                                      |            |
| I-V Curve Scan                              |           |            | Optional                                        |            |
| <b>General Data</b>                         |           |            |                                                 |            |
| Operating Temperature Range (°C)            |           |            | -35 ~ +60                                       |            |
| Relative Humidity                           |           |            | 0 ~ 100%                                        |            |
| Max. Operating Altitude (m)                 |           |            | 5000 (>4000 derating)                           |            |
| Cooling Method                              |           |            | Smart Fan Cooling                               |            |
| User Interface                              |           |            | LED, LCD (Optional), WLAN + APP                 |            |
| Communication                               |           |            | RS485 or HPLC                                   |            |
| Communication Protocols                     |           |            | Modbus RTU                                      |            |
| Weight (kg)                                 |           |            | 124.0                                           |            |
| Dimension (W x H x D mm)                    |           |            | 1120 x 810 x 368                                |            |
| Topology                                    |           |            | Non-isolated                                    |            |
| Self-consumption at Night (W)               |           |            | <3                                              |            |
| Ingress Protection Rating                   |           |            | IP66                                            |            |
| DC Connector <sup>2</sup>                   |           |            | MC4 (4 ~ 10mm <sup>2</sup> )                    |            |
| AC Connector                                |           |            | OT / DT terminal (Max. 400mm <sup>2</sup> )     |            |

\*1: Nominal Output Power

\*2: DC-strings connectors supplied by GoodWe 4-6mm<sup>2</sup>; 10mm<sup>2</sup> must be purchased separately.

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