

GOODWE

ET PLUS+ Series 16A

5-10kW | Three Phase Hybrid Inverter

ET PLUS+ Series integrates the technical strengths that make it one of the most adaptive options in the market for flexible residential needs. The series brings values of high power generation and charging power for optimal energy harvest, flexible applications enabled by smart load control and 100% unbalanced output, and sustainable system reliability and safety. It is a truly versatile quality investment piece that extends application scenarios and maximizes self-consumption ratios.



Smart Control for Smart Energy

- Smart load control
- Peak shaving



Superb Safety & Reliability

- In-built Type II SPD on DC side
- IP66 ingress protection



Friendly & Thoughtful Design

- Fanless cooling for quiet operation
- Elegant and compact design



Flexible & Adaptable Applications

- Battery ready option
- 100% unbalanced output

| Technical Data | GW5KN-ET | GW6.5KN-ET | GW8KN-ET | GW10KN-ET |
|--|--|--------------------|--------------------|---------------------|
| Battery Input Data | | | | |
| Battery Type | Li-Ion | Li-Ion | Li-Ion | Li-Ion |
| Nominal Battery Voltage (V) | 500 | 500 | 500 | 500 |
| Battery Voltage Range (V) | 180 ~ 600 | 180 ~ 600 | 180 ~ 600 | 180 ~ 600 |
| Max. Continuous Charging Current (A) | 25 | 25 | 25 | 25 |
| Max. Continuous Discharging Current (A) | 25 | 25 | 25 | 25 |
| Max. Charging Power (W) | 7500 | 8450 | 9600 | 10000 |
| Max. Discharging Power (W) | 7500 | 8450 | 9600 | 10000 |
| PV String Input Data | | | | |
| Max. Input Power (W) | 7500 | 9700 | 12000 | 15000 |
| Max. Input Voltage (V) ¹ | 1000 | 1000 | 1000 | 1000 |
| MPPT Operating Voltage Range (V) ² | 200 ~ 850 | 200 ~ 850 | 200 ~ 850 | 200 ~ 850 |
| Start-up Voltage (V) | 180 | 180 | 180 | 180 |
| Nominal Input Voltage (V) | 620 | 620 | 620 | 620 |
| Max. Input Current per MPPT (A) | 16 | 16 | 16 | 16 |
| Max. Short Circuit Current per MPPT (A) | 21.2 | 21.2 | 21.2 | 21.2 |
| Number of MPP Trackers | 2 | 2 | 2 | 2 |
| Number of Strings per MPPT | 1 | 1 | 1 | 1 |
| AC Output Data (On-grid) | | | | |
| Nominal Apparent Power Output to Utility Grid (VA) | 5000 | 6500 | 8000 | 10000 |
| Max. Apparent Power Output to Utility Grid (VA) ^{2,4} | 5500 | 7150 | 8800 | 11000 |
| Max. Apparent Power from Utility Grid (VA) | 10000 | 13000 | 15000 | 15000 |
| Nominal Output Voltage (V) | 400 / 380, 3L / N / PE | | | |
| Nominal AC Grid Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 |
| Max. AC Current Output to Utility Grid (A) | 8.5 | 10.8 | 13.5 | 16.5 |
| Max. AC Current From Utility Grid (A) | 15.2 | 19.7 | 22.7 | 22.7 |
| Power Factor | ~ 1 (Adjustable from 0.8 leading to 0.8 lagging) | | | |
| Max. Total Harmonic Distortion | <3% | <3% | <3% | <3% |
| AC Output Data (Back-up) | | | | |
| Back-up Nominal Apparent Power (VA) | 5000 | 6500 | 8000 | 10000 |
| Max. Output Apparent Power (VA) ³ | 5000 (10000@60sec) | 6500 (13000@60sec) | 8000 (16000@60sec) | 10000 (16500@60sec) |
| Max. Output Current (A) | 8.5 | 10.8 | 13.5 | 16.5 |
| Nominal Output Voltage (V) | 400 / 380 | 400 / 380 | 400 / 380 | 400 / 380 |
| Nominal Output Frequency (Hz) | 50 / 60 | 50 / 60 | 50 / 60 | 50 / 60 |
| Output THDv (@Linear Load) | <3% | <3% | <3% | <3% |
| Efficiency | | | | |
| Max. Efficiency | 98.0% | 98.0% | 98.2% | 98.2% |
| European Efficiency | 97.2% | 97.2% | 97.5% | 97.5% |
| Max. Battery to AC Efficiency | 97.5% | 97.5% | 97.5% | 97.5% |
| MPPT Efficiency | 99.9% | 99.9% | 99.9% | 99.9% |
| Protection | | | | |
| PV Insulation Resistance Detection | Integrated | Integrated | Integrated | Integrated |
| Residual Current Monitoring | Integrated | Integrated | Integrated | Integrated |
| PV Reverse Polarity Protection | Integrated | Integrated | Integrated | Integrated |
| Anti-islanding Protection | Integrated | Integrated | Integrated | Integrated |
| AC Overcurrent Protection | Integrated | Integrated | Integrated | Integrated |
| AC Short Circuit Protection | Integrated | Integrated | Integrated | Integrated |
| AC Overvoltage Protection | Integrated | Integrated | Integrated | Integrated |
| DC Switch | Integrated | Integrated | Integrated | Integrated |
| DC Surge Protection | Type II | Type II | Type II | Type II |
| AC Surge Protection | Type III | Type III | Type III | Type III |
| Remote Shutdown | Integrated | Integrated | Integrated | Integrated |
| General Data | | | | |
| Operating Temperature Range (°C) | -35 ~ +60 | -35 ~ +60 | -35 ~ +60 | -35 ~ +60 |
| Relative Humidity | 0 ~ 95% | 0 ~ 95% | 0 ~ 95% | 0 ~ 95% |
| Max. Operating Altitude (m) | 4000 | 4000 | 4000 | 4000 |
| Cooling Method | Natural Convection | Natural Convection | Natural Convection | Natural Convection |
| User Interface | LED, APP | LED, APP | LED, APP | LED, APP |
| Communication with BMS ⁵ | RS485, CAN | RS485, CAN | RS485, CAN | RS485, CAN |
| Communication with Meter | RS485 | RS485 | RS485 | RS485 |
| Communication with Portal | WiFi / WiFi + LAN (Optional) / 4G (Optional) | | | |
| Weight (kg) | 24 | 24 | 24 | 24 |
| Dimension (W x H x D mm) | 415 x 516 x 180 | 415 x 516 x 180 | 415 x 516 x 180 | 415 x 516 x 180 |
| Topology | Non-isolated | Non-isolated | Non-isolated | Non-isolated |
| Self-consumption at Night (W) ⁶ | <15 | <15 | <15 | <15 |
| Ingress Protection Rating | IP66 | IP66 | IP66 | IP66 |
| Mounting Method | Wall Mounted | Wall Mounted | Wall Mounted | Wall Mounted |

*1: For 1000V system, maximum operating voltage is 950V.

*2: According to the local grid regulation.

*3: Can be reached only if PV and battery power is enough.

*4: For Belgium, max. output apparent power (VA): GW5K-ET is 5000, GW6.5K-ET is 6500, GW8K-ET is 8000, GW10K-ET is 10000.

*5: CAN communication is configured default. If RS485 communication is used, please replace the corresponding communication line.

*6: No back-up output.

*: Please visit GoodWe website for the latest certificates.