



GEP 5-10kW

Single Phase | 3 MPPTs

GEP5.0-1C-30

GEP7.0-1C-30

GEP8.5-1C-30

GEP9.0-1C-30

GEP10-1C-30



Safety First on Your Roof

- Type II surge protection & failure alarm
- Optional AFCI and rapid shutdown*



High Yields

- Up to 20A max. DC input current per string
- 50V start-up voltage



Superior Product Design

- Excellent noise control
- IP66 Protection

The GEP5-10kW Series provides a versatile solution to meet an ever-escalating demand for solar inverters from the residential sector. This powerful single-phase inverter with 3 MPPTs is equipped with the latest technologies and comes with distinct power capacities to serve your purpose with ease. With a low start-up voltage of only 50V, a maximum DC input current of 20A, as well as a short circuit current (I_{sc}) of 25A, the series can harvest more energy from the sun and maintain stable operation over a long period of time. Furthermore, this product comes with advanced Type II Surge Protection Device (SPD) on DC&AC sides, integrated DC switch, as well as optional AFCI and rapid shutdown, enhancing operational safety on all roofs. All of these features are intelligently integrated into a lightweight solution for simple installation.



GEP5-10kW

Single Phase I 3 MPPTs

| Technical Data | GEP5.0-1C-30 | GEP7.0-1C-30 | GEP8.5-1C-30 | GEP9.0-1C-30 | GEP10-1C-30 |
|--|---|------------------------------|------------------------------|------------------------------|------------------------------|
| Input | | | | | |
| 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) | 20 | 20 | 20 | 20 | 20 |
| Max. Short Circuit Current per MPPT (A) | 25 | 25 | 25 | 25 | 25 |
| Number of MPP Trackers | 3 | 3 | 3 | 3 | 3 |
| Number of Strings per MPPT | 1 | 1 | 1 | 1 | 1 |
| Output | | | | | |
| Nominal Output Power (W) | 5000 | 7000 | 8500 | 9000 | 10000 |
| Nominal Output Apparent Power (VA) | 5000 | 7000 | 8500 | 9000 | 10000 |
| Max. AC Active Power (W) ¹ | 5500 | 7700 | 9350 | 9900 | 10000 |
| Max. AC Apparent Power (VA) ² | 5500 | 7700 | 9350 | 9900 | 10000 |
| 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. Output Current (A) ³ | 24.0 | 33.5 | 40.7 | 43.1 | 43.5 |
| Power Factor | ~1 (Adjustable from 0.8 leading to 0.8 lagging) | | | | |
| Max. Total Harmonic Distortion | <3% | <3% | <3% | <3% | <3% |
| Efficiency | | | | | |
| Max. Efficiency ⁴ | 97.8% | 97.7% | 97.9% | 97.9% | 97.9% |
| European Efficiency ⁵ | 97.2% | 97.1% | 97.3% | 97.3% | 97.3% |
| Protection | | | | | |
| 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 II | Type II | Type II | Type II | Type II |
| AC Surge Protection | Type II | Type II | Type II | Type II | Type II |
| AFCI | Optional | Optional | Optional | Optional | Optional |
| Emergency Power Off | Optional | Optional | Optional | Optional | Optional |
| Rapid Shutdown | Optional | Optional | Optional | Optional | Optional |
| Remote Shutdown | Optional | Optional | Optional | Optional | Optional |
| General Data | | | | | |
| 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) | 4000 | 4000 | 4000 | 4000 | 4000 |
| Cooling Method | Natural Convection | | | | |
| User Interface | LCD, LED (Optional) | | | | |
| Communication | WiFi, RS485 / LAN / DI (Ripple Control or DRM) (Optional) | | | | |
| Communication Protocols | Modbus-RTU (SunSpec Compliant) | | | | |
| Weight (kg) | 19 | 19 | 19 | 19 | 19 |
| Dimension (W × H × D mm) | 441 × 507 × 210 | 441 × 507 × 210 | 441 × 507 × 210 | 441 × 507 × 210 | 441 × 507 × 210 |
| Noise Emission (dB) | <30 | <30 | <30 | <30 | <30 |
| 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(2.5 ~ 4mm ²) | MC4(2.5 ~ 4mm ²) | MC4(2.5 ~ 4mm ²) | MC4(2.5 ~ 4mm ²) | MC4(2.5 ~ 4mm ²) |
| AC Connector | AC connector | AC connector | AC connector | AC connector | AC connector |

*1: For Brazil Max. AC Active Power (W): GEP7.0-1C-30 is 7000.

*2: For Brazil Max. AC Apparent Power (VA): GEP7.0-1C-30 is 7000.

*3: For Brazil Max. Output Current (A) GEP7.0-1C-30 is 33.5, GEP10-1C-30 is 45.5.

*4: For Brazil Max. Efficiency: GEP7.0-1C-30 is 97.5%, GEP10-1C-30 is 97.8%.

*5: For Brazil European Efficiency GEP7.0-1C-30 is 97.0%, GEP10-1C-30 is 97.2%.

*: Optional functions or devices are purchased separately.

** GE is a registered trademark of General Electric Company and is used under license by GoodWe Technologies Co., Ltd. © 2023 All Rights Reserved.