



High Power Generation

- 3 MPPTs
- Up to 200% DC oversizing
- Start-up voltage of only 80V



Intelligent Control

- Load consumption monitoring
- Smart Shadow Scan
- Inbuilt Export Control

The GEP 5-10kW is the ultimate solution for residential systems. This powerful single-phase model boasts 3 MPPTs for maximum power retention and absolute minimum power loss. With a startup voltage of only 80V, this superior, intelligently efficient inverter is specifically designed to harness solar power from sunrise to sunset, regardless of irradiation and weather conditions. Extra reflections from the backside of bifacial panels drive the inverter to its maximum capacity and unleash its full potential of 200% DC oversizing, allowing for up to 110% AC overloading. All these features intelligently packed into a lightweight model for a simple installation.



GEP 5-10kW

3 MPPTs | Single-phase

Technical Data	GEP5.0-1C-10	GEP8.5-1-10	GEP10-1-10
Input			
Max. Input Power (W)	10000	13500	13500
Max. Input Voltage (V)	600	600	600
MPPT Operating Voltage Range (V)	80 ~ 550	80 ~ 550	80 ~ 550
Start-up Voltage (V)	80	80	80
Nominal Input Voltage (V)	360	360	360
Max. Input Current per MPPT (A)	16	16	16
Max. Short Circuit Current per MPPT (A)	20	20	20
Number of MPP Trackers	3	3	3
Number of Strings per MPPT	1	1	1
Output		·	
Nominal Output Power (W)	5000	8500	10000
Nominal Output Apparent Power (VA)	5000	8500	10000
Max. AC Active Power (W)	5500	9350	10000
Max. AC Apparent Power (VA)	5500	9350	10000
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	23.9	42.5	45.5
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
Efficiency			
Max. Efficiency	97.7%	97.8%	97.8%
European Efficiency	97.3%	97.5%	97.5%
Protection			
PV String Current Monitoring	Integrated	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II
AC Surge Protection	Type II	Type II	Type II
AFCI	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional
General Data	· ·		·
Operating Temperature Range (°C)	-25 ~ +60	-25 ~ +60	-25 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	3000	3000	3000
Cooling Method	Natural Convection	Natural Convection	Natural Convection
User Interface	LED, LCD	LED, LCD	LED, LCD
Communication		WiFi or RS485 or LAN (Optional)	,
Communication Protocols	Modbus-RTU (SunSpec Compliant)		
Weight (kg)	22.5	22.5	22.5
Dimension (W × H × D mm)	511 × 415 × 175	511 × 415 × 175	511 × 415 × 175
Noise Emission (dB)	<30	<30	<30
Topology	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1
		IP65	IP65
Ingress Protection Rating	IP65		
Ingress Protection Rating DC Connector	IP65 MC4 (Max. 6 mm²)		
Ingress Protection Rating DC Connector AC Connector	MC4 (Max. 6 mm²) AC Connector	MC4 (Max. 6 mm²) AC Connector	MC4 (Max. 6 mm²) AC Connector

^{*} GE is a registered trademark of General Electric Company and is used under license by GoodWe Technologies Co., Ltd. © 2022 All Rights Reserved.