

# GEP 3.6-5kW

Single-phase | 2 MPPTs

GEP3.6-1-10

GEP4.2-1-10

GEP5.0-1-10



## Superior Product Design

- Elegant aesthetic look
- Colour LED screen
- Plug & Play Installation



## High Power Generation

- 98.3% maximum efficiency
- 150% DC oversizing & 110% AC overloading
- Compatible with bifacial modules

The GEP 3.6-5kW boasts beautiful aesthetics and a user friendly design from an elegant screen interface. Despite its small size, the GEP 3.6-5kW is capable of 150% DC oversizing, 110% AC overloading and 98.3% max efficiency, which gives it a unique competitive edge. The latest and most advanced safety features are intelligently integrated and packed in to this compact, but powerful model that is lightweight and and easy to install.



# GEP 3.6-5kW

2 MPPTs | Single-phase

Technical Data	GEP3.6-1-10	GEP4.2-1-10	GEP5.0-1-10
<b>Input</b>			
Max. Input Power (W) <sup>2</sup>	5500	6300	7500
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)	13	13	13
Max. Short Circuit Current per MPPT (A) <sup>1</sup>	16.3	16.3	16.3
Number of MPP Trackers	2	2	2
Number of Strings per MPPT	1	1	1
<b>Output</b>			
Nominal Output Power (W)	3600	4200	5000
Nominal Output Apparent Power (VA)	3600	4200	5000
Max. AC Active Power (W)	3960	4620	5500
Max. AC Apparent Power (VA)	3960	4620	5500
Nominal Output Voltage (V)	220 / 230	220 / 230	220 / 230
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	18.0	21.0	25.0
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
<b>Efficiency</b>			
Max. Efficiency	98.3%	98.3%	98.3%
European Efficiency	97.5%	97.6%	97.8%
<b>Protection</b>			
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
<b>General Data</b>			
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 , RS485 or LAN (Optional)		
Communication Protocols	Modbus-RTU (SunSpec Compliant)		
Weight (kg)	11.0	11.0	11.0
Dimension (W × H × D mm)	336 × 400 × 124	336 × 400 × 124	336 × 400 × 124
Topology	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1
Ingress Protection Rating	IP65	IP65	IP65
Country of Manufacture	China	China	China

\*1: For Australia Max. Short Circuit Current per MPPT (A) please refer to 'Manufacturer declaration: short circuit current'.

\*2: For Brazil Max. Input Power (W), GEP3.6-1-10 is 6480, GEP5.0-1-10 is 9000.

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# GEP 3.6-6kW

Single-phase | 2 MPPTs

GEP3.6-1-30

GEP4.2-1-30

GEP5.0-1-30

GEP6.0-1-30



## Intelligent Control & Monitoring

- 24/7 load consumption monitoring
- Dry contact connection



## Safety First on Your Roof

- Optional AFCI ensures system safety\*
- Type II surge protection & failure alarm



## High Yields

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

The GEP 3.6-6kW is a perfect match for residential installations thanks to its elegant aesthetic design and super quiet operation below 25dB. Integrated with 16A high-current input and 150% DC input oversizing capabilities, the series is compatible with all types of PV panels and bring you optimised power generation. For guaranteed safety, the inverter also features optional AFCI and Type II Surge Protection Device (SPD) on both DC and AC sides, to protect the system from electrical fire and lightning hazards. All these advanced features are intelligently packed in this compact, albeit powerful, series.



# GEP 3.6-6kW

2 MPPTs | Single-phase

Technical Data	GEP3.6-1-30	GEP4.2-1-30	GEP5.0-1-30	GEP6.0-1-30
<b>Input</b>				
Max. Input Power (W)	5400	6300	7500	9000
Max. Input Voltage (V)	600	600	600	600
MPPT Operating Voltage Range (V)	40 ~ 560	40 ~ 560	40 ~ 560	40 ~ 560
Start-up Voltage (V)	50	50	50	50
Nominal Input Voltage (V)	360	360	360	360
Max. Input Current per MPPT (A)	16	16	16	16
Max. Short Circuit Current per MPPT (A)	23	23	23	23
Number of MPP Trackers	2	2	2	2
Number of Strings per MPPT	1	1	1	1
PV Input Operating Voltage Range (V)	40 ~ 600	40 ~ 600	40 ~ 600	40 ~ 600
<b>Output</b>				
Nominal Output Power (W)	3600	4200	5000	6000
Nominal Output Apparent Power (VA)	3600	4200	5000	6000
Max. AC Active Power (W)	3960	4620	5500	6600
Max. AC Apparent Power (VA)	3960	4620	5500	6600
Nominal Output Voltage (V)	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
Max / Rated Output Current (A)	17.3	20.1	24.0	28.8
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%
<b>Efficiency</b>				
Max. Efficiency	97.9%	97.9%	97.9%	97.9%
European Efficiency	97.0%	97.2%	97.3%	97.4%
<b>Protection</b>				
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated
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 II	Type II	Type II	Type II
AFCI	Optional	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional	Optional
<b>General Data</b>				
Operating Temperature Range (°C)	-25 ~ +60	-25 ~ +60	-25 ~ +60	-25 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	3000	3000	3000	3000
Cooling Method	Natural Convection			
User Interface	LED, LCD, WLAN + APP			
Communication	WiFi, RS485 or LAN or 4G (Optional)			
Communication Protocols	Modbus-RTU (SunSpec Compliant)			
Weight (kg)	13.1	13.1	13.1	13.7
Dimension (W × H × D mm)	350 × 410 × 143	350 × 410 × 143	350 × 410 × 143	350 × 410 × 143
Noise Emission (dB)	<25	<25	<25	<25
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1	<1
Ingress Protection Rating	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> )
AC Connector	Plug and play connector (Max.6mm <sup>2</sup> )			
Country of Manufacture	China	China	China	China

\*: Optional functions or devices are purchased separately.

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# GEP 5-10kW

Single Phase | 3 MPPTs

GEP5.0-1C-30

GEP8.5-1C-30

GEP9.9-1C-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 (Isc) 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	GEP8.5-1C-30	GEP9.9-1C-30	GEP10-1C-30
<b>Input</b>				
Max. Input Power (W) <sup>4</sup>	7750	13175	15500	15500
Max. Input Voltage (V)	600	600	600	600
MPPT Operating Voltage Range (V)	40 ~ 560	40 ~ 560	40 ~ 560	40 ~ 560
PV Input Operating Voltage Range (V)	40 ~ 600	40 ~ 600	40 ~ 600	40 ~ 600
Start-up Voltage (V)	50	50	50	50
Nominal Input Voltage (V)	360	360	360	360
Max. Input Current per MPPT (A)	20	20	20	20
Max. Short Circuit Current per MPPT (A)	25	25	25	25
Number of MPP Trackers	3	3	3	3
Number of Strings per MPPT	1	1	1	1
<b>Output</b>				
Nominal Output Power (W)	5000	8500	9900	10000
Nominal Output Apparent Power (VA)	5000	8500	9900	10000
Max. AC Active Power (W)	5500	9350	9900	10000
Max. AC Apparent Power (VA)	5500	9350	9900	10000
Nominal Output Voltage (V)	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240
Output Voltage Range (V) (according to local standard)	160 ~ 270	160 ~ 270	160 ~ 270	160 ~ 270
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
AC Grid Frequency Range (Hz)	45 ~ 65	45 ~ 65	45 ~ 65	45 ~ 65
Max. Output Current (A) <sup>1</sup>	24.0	40.7	43.1	43.5
Rated Output Current(A)	24.0	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%
<b>Efficiency</b>				
Max. Efficiency <sup>2</sup>	97.8%	97.9%	97.9%	97.9%
European Efficiency <sup>3</sup>	97.2%	97.3%	97.3%	97.3%
<b>Protection</b>				
PV String Current Monitoring	Integrated	Integrated	Integrated	Integrated
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 II	Type II	Type II	Type II
AFCI	Optional	Optional	Optional	Optional
Power Supply at Night	Optional	Optional	Optional	Optional
<b>General Data</b>				
Operating Temperature Range (°C)	-25 ~ +60	-25 ~ +60	-25 ~ +60	-25 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	4000	4000	4000	4000
Cooling Method	Natural Convection	Natural Convection	Natural Convection	Natural Convection
User Interface	LCD, LED (Optional)	LCD, LED (Optional)	LCD, LED (Optional)	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
Dimension (W × H × D mm)	441 × 507 × 210	441 × 507 × 210	441 × 507 × 210	441 × 507 × 210
Noise Emission (dB)	<30	<30	<30	<30
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1	<1
Ingress Protection Rating	IP66	IP66	IP66	IP66
DC Connector	MC4 (2.5 ~ 4mm <sup>2</sup> )	MC4 (2.5 ~ 4mm <sup>2</sup> )	MC4 (2.5 ~ 4mm <sup>2</sup> )	MC4 (2.5 ~ 4mm <sup>2</sup> )
AC Connector	AC connector	AC connector	AC connector	AC connector
Country of Manufacture	China	China	China	China

\*1: For Brazil Max. Output Current (A): GEP10-1C-30 is 45.5.

\*2: For Brazil Max. Efficiency: GEP10-1C-30 is 97.8%.

\*3: For Brazil European Efficiency: GEP10-1C-30 is 97.2%.

\*4: For Brazil Max. Input Power (W): GEP10-1C-30 is 18000.

\*: Optional functions or devices are purchased separately.

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# GEP 5-10kW

Single-phase | 3 MPPTs

GEP5.0-1C-10

GEP8.5-1-10

GEP10-1-10



## High Power Generation

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



## 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 80 V, 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
<b>Input</b>			
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)	13 / 13 / 13	13 / 13 / 13	13 / 13 / 13
Max. Short Circuit Current per MPPT (A) <sup>*1</sup>	16.3 / 16.3 / 16.3		
Number of MPP Trackers	3	3	3
Number of Strings per MPPT	1	1	1
<b>Output</b>			
Nominal Output Power (W)	5000	8500	10000
Nominal Output Apparent Power (VA)	5000	8500	10000
Max. AC Apparent Power (VA)	5500	9350	10000
Nominal Output Voltage (V)	220 / 230	220 / 230	220 / 230
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%
<b>Efficiency</b>			
Max. Efficiency	97.7%	97.8%	97.8%
European Efficiency	97.3%	97.5%	97.5%
<b>Protection</b>			
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 Surge Protection	Integrated (Type II)		
AC Surge Protection	Integrated (Type II)		
<b>General Data</b>			
Operating Temperature Range (°C)	-25 ~ 60	-25 ~ 60	-25 ~ 60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	≤4000	≤4000	≤4000
Cooling Method	Natural Convection	Natural Convection	Natural Convection
Display	LCD & LED	LCD & LED	LCD & LED
Communication	Wi-Fi / RS485 / LAN (Optional)		
Weight (kg)	22.5	22.5	22.5
Dimension (W × H × D mm)	511 × 415 × 175		
Topology	Transformerless		
Self-consumption at Night (W)	<1	<1	<1
Ingress Protection Rating	IP65	IP65	IP65
Country of Manufacture	China	China	China

\*1: For Australia Max. Short Circuit Current per MPPT (A) please refer to 'Manufacturer declaration: short circuit current'.

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# GEP 5-20kW

Three-phase | 2 MPPTs

GEP5.0-3-10

GEP8-3-AU10

GEP9.9-3-AU10

GEP10-3-AU10

GEP15-3-10

GEP20-3-10



## High Yields

- Max. 15A per string
- Up to 200% DC oversizing & 110% AC overloading



## Safety First on Your Roof

- AFCI & module-level rapid shutdown for safest solar\*
- Type II SPD now exchangeable\*



## User & Installer Friendly

- A pleasant living environment thanks to excellent noise control: 5-10kW <25dB
- 24h real-time consumption monitoring\*

Intelligent safety features and unmatched efficiency place this model into a league of its own. This three phase inverter is a perfect choice for small business needs and a wider scale of residential applications, with the capability of 200% oversizing, incredible efficiency, and compatibility with the latest high power & bifacial modules. The most advanced safety features are intelligently integrated for maximum security and peace of mind. The modular design makes operation and maintenance much easier, providing upgraded safety and reliability. Welcome to the future of intelligent energy. Say hello to GEP 5-20kW.



# GEP 5-20kW

2 MPPTs | Three-phase

Technical Data	GEP5.0-3-10	GEP8-3-AU10	GEP9.9-3-AU10	GEP10-3-AU10	GEP15-3-10	GEP20-3-10
<b>Input</b>						
Max. Input Power (W)	10000	16000	20000	20000	30000	40000
Max. Input Voltage (V)	1100	1100	1100	1100	1100	1100
MPPT Operating Voltage Range (V)	140 ~ 950	140 ~ 950	140~950	140 ~ 950	140 ~ 950	140 ~ 950
Start-up Voltage (V)	180	180	180	180	180	180
Nominal Input Voltage (V)	620	620	620	620	620	620
Max. Input Current per MPPT (A)	15	30	30	30	30	30
Max. Short Circuit Current per MPPT (A)	18.7	37.5	37.5	37.5	37.5	37.5
Number of MPP Trackers	2	2	2	2	2	2
Number of Strings per MPPT	1	2	2	2	2	2
<b>Output</b>						
Nominal Output Power (W)	8000	8000	9900	10000	15000	20000
Nominal Output Apparent Power (VA)	8000	8000	9900	10000	15000	20000
Max. AC Active Power (W)	8800	8800	9900	11000	16500	22000
Max. AC Apparent Power (VA)	8800	8800	9900	11000	16500	22000
Nominal Output Voltage (V)	380 / 400 / 415, 3 / N / PE					
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	8.0	12.8	14.4	16.0	24.0	32.0
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)					
Max. Total Harmonic Distortion	<3%	<3%	<3%	<3%	<3%	<3%
<b>Efficiency</b>						
Max. Efficiency	98.3%	98.3%	98.3%	98.3%	98.4%	98.4%
European Efficiency	97.6%	97.6%	97.6%	97.6%	97.8%	97.8%
<b>Protection</b>						
PV Insulation Resistance Detection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Switch	Integrated	Integrated	Integrated	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II	Type II	Type II	Type II
AC Surge Protection	Type III (Type II Optional)					
AFCI	Optional	Optional	Optional	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional	Optional	Optional	Optional
<b>General Data</b>						
Operating Temperature Range (°C)	-30 ~ +60	-30 ~ +60	-30 ~ +60	-30 ~ +60	-30 ~ +60	-30 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	3000	3000	3000	3000	3000	3000
Cooling Method	Natural Convection			Smart Fan Cooling		
User Interface	LED, LCD (Optional), WLAN + APP					
Communication	RS485 or WiFi or LAN or 4G (Optional)					
Communication Protocols	Modbus-RTU (SunSpec Compliant)					
Weight (kg)	20.5	24.0	24.0	24.0	26.0	26.0
Dimension (W × H × D mm)	415 × 511 × 175					
Noise Emission (dB)	<25	<25	<25	<25	<50	<50
Topology	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1	<1	<1	<1	<1
Ingress Protection Rating	IP65	IP65	IP65	IP65	IP65	IP65
DC Connector	MC4 (2.5 ~ 4mm <sup>2</sup> )					
AC Connector	OT Terminal	OT Terminal	OT Terminal	OT Terminal	OT Terminal	OT Terminal
Country of Manufacture	China	China	China	China	China	China

\*: Optional functions are purchased separately.

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# GEP 29.9kW

Three-phase | 3 MPPTs

GEP29.9-10



## High Power Generation

- Max. 15A input per string
- Full-load running at 50°C



## Maximum Safety

- Type II SPD for both AC & DC
- Optional AFCI protecting circuits from arc faults\*



## Intelligent O&M

- Precise string current monitoring
- PID recovery optional\*

The GEP 29.9kW offers 3 MPPTs and has been designed to meet commercial requirements. This future-ready machine comes with film capacitor, fuse-free design, Type II surge protection on both DC & AC sides, ensuring longer life-span and maximum safety for rooftop PV systems. The GEP 29.9kW requires minimum operation and maintenance and offers an improved overall user experience. All these intelligent features makes the GEP 29.9kW one of the most future-proof inverters in its class.



# GEP 29.9kW

3 MPPTs | Three-phase

Technical Data		GEP29.9-10
<b>Input</b>		
Max. Input Power (kW)		45
Max. Input Voltage (V)		1100
MPPT Operating Voltage Range (V)		200 ~ 950
Start-up Voltage (V)		180
Nominal Input Voltage (V)		600
Max. Input Current per MPPT (A)		30
Max. Short Circuit Current per MPPT (A)		37.5
Number of MPP Trackers		3
Number of Strings per MPPT		2
<b>Output</b>		
Nominal Output Power (kW)		29.9
Nominal Output Apparent Power (kVA)		29.9
Max. AC Active Power (kW)		29.9
Max. AC Apparent Power (kVA)		29.9
Nominal Output Voltage (V)		400, 3L / N / PE or 3L / PE
Nominal AC Grid Frequency (Hz)		50 / 60
Max. Output Current (A)		43.3
Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)
Max. Total Harmonic Distortion		<3%
<b>Efficiency</b>		
Max. Efficiency		98.3%
European Efficiency		98.0%
<b>Protection</b>		
PV String Current 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
Remote Shutdown		Optional
PID Recovery		Optional
<b>General Data</b>		
Operating Temperature Range (°C)		-30 ~ +60
Relative Humidity		0 ~ 100%
Max. Operating Altitude (m)		3000
Cooling Method		Smart Fan Cooling
User Interface		LED, LCD (Optional), WLAN + APP
Communication		RS485, WiFi or PLC (Optional)
Communication Protocols		Modbus-RTU (SunSpec Compliant)
Weight (kg)		40.0
Dimension (W × H × D mm)		480 × 590 × 200
Noise Emission (dB)		<60
Topology		Non-isolated
Self-consumption at Night (W)		<1
Ingress Protection Rating		IP65
DC Connector		MC4 (4 ~ 6mm <sup>2</sup> )
AC Connector		OT / DT Terminal (Max.25mm <sup>2</sup> )
Country of Manufacture		China

\* Optional functions are purchased separately.

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# GEP 29.9kW

Three-phase | 3 MPPTs

GEP29.9-10



## High Power Generation

- Max. 15A input per string
- Full-load running at 50°C



## Maximum Safety

- Type II SPD for both AC & DC
- Optional AFCI protecting circuits from arc faults\*



## Intelligent O&M

- Precise string current monitoring
- PID recovery optional\*

The GEP 29.9kW offers 3 MPPTs and has been designed to meet commercial requirements. This future-ready machine comes with film capacitor, fuse-free design, Type II surge protection on both DC & AC sides, ensuring longer life-span and maximum safety for rooftop PV systems. The GEP 29.9kW requires minimum operation and maintenance and offers an improved overall user experience. All these intelligent features makes the GEP 29.9kW one of the most future-proof inverters in its class.



# GEP 29.9kW

3 MPPTs | Three-phase

Technical Data		GEP29.9-10
<b>Input</b>		
Max. Input Power (kW)		45
Max. Input Voltage (V)		1100
MPPT Operating Voltage Range (V)		200 ~ 950
Start-up Voltage (V)		180
Nominal Input Voltage (V)		600
Max. Input Current per MPPT (A)		30
Max. Short Circuit Current per MPPT (A)		37.5
Number of MPP Trackers		3
Number of Strings per MPPT		2
<b>Output</b>		
Nominal Output Power (kW)		29.9
Nominal Output Apparent Power (kVA)		29.9
Max. AC Active Power (kW)		29.9
Max. AC Apparent Power (kVA)		29.9
Nominal Output Voltage (V)		400, 3L / N / PE or 3L / PE
Nominal AC Grid Frequency (Hz)		50 / 60
Max. Output Current (A)		43.3
Power Factor		~1 (Adjustable from 0.8 leading to 0.8 lagging)
Max. Total Harmonic Distortion		<3%
<b>Efficiency</b>		
Max. Efficiency		98.3%
European Efficiency		98.0%
<b>Protection</b>		
PV String Current 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
Remote Shutdown		Optional
PID Recovery		Optional
<b>General Data</b>		
Operating Temperature Range (°C)		-30 ~ +60
Relative Humidity		0 ~ 100%
Max. Operating Altitude (m)		3000
Cooling Method		Smart Fan Cooling
User Interface		LED, LCD (Optional), WLAN + APP
Communication		RS485, WiFi or PLC (Optional)
Communication Protocols		Modbus-RTU (SunSpec Compliant)
Weight (kg)		40.0
Dimension (W × H × D mm)		480 × 590 × 200
Noise Emission (dB)		<60
Topology		Non-isolated
Self-consumption at Night (W)		<1
Ingress Protection Rating		IP65
DC Connector		MC4 (4 ~ 6mm <sup>2</sup> )
AC Connector		OT / DT Terminal (Max.25mm <sup>2</sup> )
Country of Manufacture		China

\* Optional functions are purchased separately.

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# GEP 50-60kW

Three-phase | Up to 6 MPPTs

GEP50-10

GEP60-10



## High Power Generation

- Up to 6 MPPTs
- Full-load running at 50°C



## Maximum Safety

- Type I SPD optional for DC\*
- Input reverse polarity protection



## Intelligent O&M

- Precise string current monitoring
- PID recovery optional\*

The GEP 50-60kW has been designed to meet the increasing expectations from the C&I segment. The GEP 50-60kW offers up to 6 MPPTs and is the ultimate solution for commercial rooftop PV systems. This future-ready machine comes with film capacitor and fuse-free design, optional Type I surge protection on the DC side, ensuring faster trouble-shooting, longer life-span and maximum safety. The GEP 50-60kW Series requires minimum O&M and offers an improved overall user experience for maximum comfort and minimum operation. All these intelligent features make the GEP 50-60kW one of the most future-proof inverters in its class.



# GEP 50-60kW

Up to 6 MPPTs | Three-phase

Technical Data	GEP50-10	GEP60-10
<b>Input</b>		
Max. Input Power (kW)	75	90
Max. Input Voltage (V)	1100	1100
MPPT Operating Voltage Range (V)	200 ~ 950	200 ~ 950
Start-up Voltage (V)	180	180
Nominal Input Voltage (V)	600	600
Max. Input Current per MPPT (A)	30	30
Max. Short Circuit Current per MPPT (A)	37.5	37.5
Number of MPP Trackers	5	6
Number of Strings per MPPT	2	2
<b>Output</b>		
Nominal Output Power (kW)	50	60
Nominal Output Apparent Power (kVA)	50	60
Max. AC Active Power (kW)	55	66
Max. AC Apparent Power (kVA)	55	66
Nominal Output Voltage (V)	400, 3L / N / PE or 3L / PE	
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60
Max. Output Current (A)	80.0	96.0
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion	<3%	<3%
<b>Efficiency</b>		
Max. Efficiency	98.3%	98.3%
European Efficiency	98.0%	98.0%
<b>Protection</b>		
PV String Current Monitoring	Integrated	Integrated
PV Insulation Resistance Detection	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated
Anti-islanding Protection	Integrated	Integrated
AC Overcurrent Protection	Integrated	Integrated
AC Short Circuit Protection	Integrated	Integrated
AC Overvoltage Protection	Integrated	Integrated
DC Switch	Integrated	Integrated
DC Surge Protection	Type II (Type I Optional)	
AC Surge Protection	Type II	Type II
AFCI	Optional	Optional
Remote Shutdown	Optional	Optional
PID Recovery	Optional	Optional
<b>General Data</b>		
Operating Temperature Range (°C)	-30 ~ +60	-30 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	3000	3000
Cooling Method	Smart Fan Cooling	Smart Fan Cooling
User Interface	LED, LCD (Optional), WLAN + APP	
Communication	RS485, WiFi or PLC (Optional)	
Communication Protocols	Modbus-RTU (SunSpec Compliant)	
Weight (kg)	55.0	55.0
Dimension (W × H × D mm)	520 × 660 × 220	520 × 660 × 220
Noise Emission (dB)	<60	<60
Topology	Non-isolated	Non-isolated
Self-consumption at Night (W)	<1	<1
Ingress Protection Rating	IP65	IP65
DC Connector	MC4 (4 ~ 6mm <sup>2</sup> )	MC4 (4 ~ 6mm <sup>2</sup> )
AC Connector	OT / DT Terminal (Max.25mm <sup>2</sup> )	
Country of Manufacture	China	China

\*: Optional functions are purchased separately.

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# GEP 100-120kW

Three-phase | Up to 12 MPPTs

GEP100-10

GEP110-10

GEP120-10



## High Power Generation

- Max. 15A Input per string
- Compatibility with high-power modules



## Maximum Safety

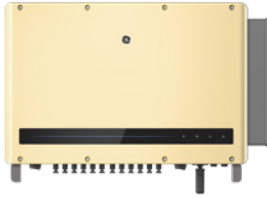
- AFCI optional for safest solar power\*
- IP66 and C5 protection optional\*



## Intelligent O&M

- String Level Monitoring
- Easy and quick setup via Bluetooth

The GEP 100-120kW Series is designed for C&I and small utility projects, to provide the competitive edge in efficiency for renewable energy sources. Featuring up to 12 MPPTs, oversizing capabilities and compatibility with the latest high power & bifacial modules, the GEP 100-120kW Series offers the lowest levelised cost of electricity (LCOE). The series also takes safety to the maximum level, in complying with the strictest industry standards in the toughest Australian climate conditions.



# GEP 100-120kW

Up to 12 MPPTs | Three-phase

Technical Data	GEP100-10	GEP110-10	GEP120-10
<b>Input</b>			
Max. Input Power (kW)	150	165	180
Max. Input Voltage (V)	1100	1100	1100
MPPT Operating Voltage Range (V)	180 ~ 1000	180 ~ 1000	180 ~ 1000
Start-up Voltage (V)	200	200	200
Nominal Input Voltage (V)	600	600	600
Max. Input Current per MPPT (A)	30	30	30
Max. Short Circuit Current per MPPT (A)	45	45	45
Number of MPP Trackers	10	12	12
Number of Strings per MPPT	2	2	2
<b>Output</b>			
Nominal Output Power (kW)	99.99	110	120
Nominal Output Apparent Power (kVA)	99.99	110	120
Max. AC Active Power (kW)	99.99	121	132
Max. AC Apparent Power (kVA)	99.99	121	132
Nominal Output Voltage (V)	400, 3L / N / PE or 3L / PE		
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. Output Current (A)	167.0	175.5	191.3
Power Factor	~1(Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
<b>Efficiency</b>			
Max. Efficiency	98.6%	98.6%	98.6%
European Efficiency	98.3%	98.3%	98.3%
<b>Protection</b>			
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 I Optional)		
AC Surge Protection	Type II (Type I Optional)		
AFCI	Optional	Optional	Optional
Remote Shutdown	Optional	Optional	Optional
PID Recovery	Optional	Optional	Optional
<b>General Data</b>			
Operating Temperature Range (°C)	-30 ~ +60	-30 ~ +60	-30 ~ +60
Relative Humidity	0 ~ 100%	0 ~ 100%	0 ~ 100%
Max. Operating Altitude (m)	5000 (>4000 derating)		
Cooling Method	Smart Fan Cooling		
User Interface	LED, LCD (Optional), WLAN + APP		
Communication	RS485, WiFi or 4G (Optional)		
Communication Protocols	Modbus-RTU (SunSpec Compliant)		
Weight (kg)	93.5	98.5	98.5
Dimension (W × H × D mm)	1008 × 678 × 343		
Topology	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W)	<2	<2	<2
Ingress Protection Rating	IP66	IP66	IP66
DC Connector	MC4(4 ~ 6mm <sup>2</sup> )		
AC Connector	OT / DT terminal (Max. 300mm <sup>2</sup> )		
Country of Manufacture	China	China	China

\*: Optional functions or devices are purchased separately.

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# GEH 5-10kW

Single-phase Hybrid | Up to 4 MPPTs

GEH5.0-1U-10

GEH8.6-1U-10

GEH10-1U-10



## Incessant Power Supply

- Full backup capacity up to 10kW
- UPS-level switching



## High Power Generation

- Up to 4 MPPTs
- Up to 150% DC oversizing



## Maximum Safety

- AC bypass switch
- AFCI & RSD for system safety\*

The GEH series is a unique single-phase hybrid inverter that offers up to four MPPTs, is compatible with high voltage (80-495V) batteries and has a power capacity ranging from 5kW to 10kW. Homeowners can now experience the ultimate solution for maximising generation and self-consumption in comfort and security. Intelligent mechanisms are timely activated to ensure power supply to critical loads when most needed. With up to 4 MPPTs, this inverter seamlessly adapts to complex rooftops on large residential properties. It is equipped with rapid battery charge and is perfectly capable of powering large loads in back-up mode. This champion of energy independence integrates intelligent safety features that are second to none. When the grid is compromised, UPS-level switching allows the inverter to switch to back-up mode in less than 10ms. Loads connected to the back-up stay powered on and ensure the safety of your electrical appliances. AFCI (Arc-fault current interrupter) and rapid shutdown options likewise ensure the safety of the whole PV system, offering freedom and security all in one.



# GEH 5-10kW

Up to 4 MPPTs | Single-phase Hybrid

Technical Data	GEH5.0-1U-10	GEH8.6-1U-10	GEH10-1U-10 <sup>*6</sup>
<b>Battery Input Data</b>			
Battery Type	Li-Ion (BYD HVM & HVS, LG RESU, RESU10H Prime, RESU16H Prime, GOODWE LX S - H, GOODWE LX F - H, GOODWE LX F)		
Nominal Battery Voltage (V)	350	350	350
Battery Voltage Range (V) <sup>*1</sup>	80 ~ 495	80 ~ 495	80 ~ 495
Max. Continuous Charging Current (A)	50	50	50
Max. Continuous Discharging Current (A)	50	50	50
Max. Charging Power (W)	5000	8600	9600
Max. Discharging Power (W)	5250	9030	10080
<b>PV String Input Data</b>			
Max. Input Power (W)	7500	12900	15000
Max. Input Voltage (V) <sup>*2</sup>	600	600	600
MPPT Operating Voltage Range (V) <sup>*3</sup>	80 ~ 550	80 ~ 550	80 ~ 550
Start-up Voltage (V)	95	95	95
Nominal Input Voltage (V)	380	380	380
Max. Input Current per MPPT (A)	13	13	13
Max. Short Circuit Current per MPPT (A) <sup>*7</sup>	16.3	16.3	16.3
Number of MPP Trackers	3	4	4
Number of Strings per MPPT	1	1	1
<b>AC Output Data (On-grid)</b>			
Nominal Apparent Power Output to Utility Grid (VA)	5000	8600	9500@220Vac / 10000@230Vac
Max. Apparent Power Output to Utility Grid (VA) <sup>*4</sup>	5000	8600	9500@220Vac / 10000@230Vac
Max. Apparent Power from Utility Grid (VA)	6000	10000	10000
Nominal Output Voltage (V)	220 / 230	220 / 230	220 / 230
Nominal AC Grid Frequency (Hz)	50 / 60	50 / 60	50 / 60
Max. AC Current Output to Utility Grid (A)	23.0	39.0	43.5
Max. AC Current from Utility Grid (A)	27.0	45.5	45.5
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
Max. Total Harmonic Distortion	<3%	<3%	<3%
<b>AC Output Data (Back-up)</b>			
Back-up Nominal Apparent Power (VA)	5000	8600	9500@220Vac / 10000@230Vac
Max. Output Apparent Power (VA) <sup>*4</sup>	5000 (6000@60sec)	8600 (10320@60sec)	9500@220Vac / 10000@230Vac (12000@60sec)
Max. Output Current (A)	23.0	39.0	43.5
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)	230 (±2%)
Nominal Output Frequency (Hz)	50 / 60 (±0.2%)	50 / 60 (±0.2%)	50 / 60 (±0.2%)
Output THDv (@Linear Load)	<3%	<3%	<3%
<b>Efficiency</b>			
Max. Efficiency	97.6%	97.6%	97.6%
European Efficiency	97.0%	97.0%	97.0%
Max. Battery to AC Efficiency	96.5%	96.5%	96.5%
MPPT Efficiency	99.9%	99.9%	99.9%
<b>Protection</b>			
PV Insulation Resistance Detection	Integrated	Integrated	Integrated
Residual Current Monitoring	Integrated	Integrated	Integrated
PV Reverse Polarity Protection	Integrated	Integrated	Integrated
Battery 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
AC Switch	Integrated	Integrated	Integrated
DC Surge Protection	Type II	Type II	Type II
AC Surge Protection	Type II	Type II	Type II
AFCl	Optional	Optional	Optional
Rapid Shutdown	Optional	Optional	Optional
<b>General Data</b>			
Operating Temperature Range (°C)	-35 ~ +60	-35 ~ +60	-35 ~ +60
Relative Humidity	0 ~ 95%	0 ~ 95%	0 ~ 95%
Max. Operating Altitude (m)	4000	4000	4000
Cooling Method	Smart Fan Cooling	Smart Fan Cooling	Smart Fan Cooling
User Interface	LED, WLAN + APP	LED, WLAN + APP	LED, WLAN + APP
Communication with BMS	RS485, CAN	RS485, CAN	RS485, CAN
Communication with Meter	RS485	RS485	RS485
Communication with Portal	WiFi	WiFi	WiFi
Weight (kg)	28.8	32.3	32.3
Dimension (W × H × D mm)	415 × 791 × 175	415 × 791 × 175	415 × 791 × 175
Noise Emission (dB)	<50	<50	<50
Topology	Non-isolated	Non-isolated	Non-isolated
Self-consumption at Night (W) <sup>*5</sup>	<20	<20	<20
Ingress Protection Rating	IP65	IP65	IP65
DC Connector	MC4	MC4	MC4
AC Connector	MC4	MC4	MC4
Mounting Method	Wall Mounted	Wall Mounted	Wall Mounted
Country of Manufacture	China	China	China

\*1: Battery discharge / charge power limited by voltage.

\*2: Inverter will not work when PV input voltage ≥585V.

\*3: When there is no battery connected, inverter starts feeding in only if string voltage is higher than 200V.

\*4: Can be reached only if PV and battery power is enough.

\*5: No Back-up Output.

\*6: The model name does not represent the rated power, please refer to the marked parameters for details.

\*7: For Australia Max. Short Circuit Current per MPPT (A) please refer to 'Manufacturer declaration: short circuit current'.

\*: Optional functions are purchased separately.

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