GOODWE

EO G2 Series

3-6kW I Single Phase I Off-grid Inverter
1-2 MPPTs

The GoodWe EO G2 Series single-phase off-grid inverter is an ideal solution for homes in areas without grid access or those experiencing frequent power outages. It supports direct generator connection and parallel operation of up to 10 units for flexible off-grid power, while the user-friendly setup minimizes installation costs. As an efficient, flexible, and reliable off-grid solution, the EO G2 provides households with continuous energy security.



COMING SOON

Optimized Performance

- **200%** DC oversizing & **21A** PV input current per string
- Up to **130A continuous** charge/discharge, scalable to **10** units in parallel
- **4.3″** touchscreen for easy interaction

Flexible & Adaptable Applications

- Supports microgrid & AC coupling features
- Supporting single-phase group to three-phase
- Three AC ports design: connects generator, on-grid inverter & smart load

Smart Control & Monitoring

- Supports full-load applications, reducing system costs
- 24/7 load consumption monitoring
- Remote and one-click upgrade for easy O&M

Superb Safety & Reliability

- Seamless switching to backup **<4ms**
- **IP66** protection ensures reliable quality
- Robust surge for reliable inductive-load startup off-grid

EO G2 Series

GOODWE

Technical Data	GW3K-EO-G20	GW3.6K-EO-G20	GW5K-EO-G20	GW6K-EO-G20
Battery Side				
Battery Type	Li-Ion / Lead-acid			
Nominal Voltage (V)	48			
Voltage Range (V)	40 ~ 60			
Start-up Voltage (V)	44.2			
Number of Battery Inputs	1			
Max. Continuous Charging Current (A)	70	90	120	130
Max. Continuous Discharging Current (A)	70	90	120	130
Max. Charging Power (kW)	3.0	3.6	5.0	6.0
Max. Discharging Power (kW)	3.3	4.0	5.5	6.6
PV Side				
Max. Input Power (kW)	6.0	7.2	10.0	12.0
Max. Input Voltage (V)*1	530			
MPPT Operating Voltage Range (V)*2	50 ~ 480			
Start-up Voltage (V)	60			
Nominal Input Voltage (V)	360			
Max. MPPT Current (A)	21	21	21 / 21	21 / 21
Max. MPPT Short Circuit Current (A)	26	26	26 / 26	26 / 26
Number of MPPTs	1	1	2	2
Number of Strings per MPPT	1			
AC Side (On-Grid)				
Nominal Power (kW)	3.0	3.6	5.0	6.0
Max. Power (kW)	3.3	4.0	5.5	6.6
Rated Apparent Power from Grid (kVA)	3.0	3.6	5.0	6.0
Max. Apparent Power from Grid (kVA)	8.0	8.0	8.0	8.0
Nominal Voltage (V)	220 / 230, L / N / PE			
Voltage Range (V)	170 ~ 280			
Nominal Frequency (Hz)	50 / 60			
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65			
Rated Current from Grid (A)	13.7@220V; 13.1@230V	16.4@220V; 15.7@230V	22.8@220V; 21.8@230V	27.3@220V; 26.1@230V
Max. Current from Grid (A)	35			
Power Factor	0.8 leading ~ 0.8 lagging			
THDi	<3%			
AC Side (Back-up Port)				
Rated Apparent Power (kVA)	3.0	3.6	5.0	6.0
Max. Apparent Power (kVA)	Off-grid: 3.3 (7.2, 10s) Bypass: 7.2	Off-grid: 4 (7.2, 10s) Bypass: 7.2	Off-grid: 5.5 (12, 10s) Bypass: 8	Off-grid: 6.6 (12, 10s) Bypass: 8
Nominal Voltage (V)	220 / 230, L / N / PE			
Nominal Frequency (Hz)	50 / 60			
Max. Current (A)*3	Off-grid: 15; Bypass: 35	Off-grid: 18; Bypass: 35	Off-grid: 25; Bypass: 35	Off-grid: 30; Bypass: 35
THDv (@Linear Load)	<3%			
On / Off-grid Switching Time (ms)	≤4			
AC Side (Smart Port)				
Max. Apparent Power (kVA)	8			
Nominal Voltage (V)	220 / 230			
Nominal Frequency (Hz)	50 / 60			
Frequency Range (Hz)	45 ~ 55 / 55 ~ 65			
Max. Current (A)	35			
AC Side (Smart Port)				
Max. Efficiency	97.6%			
Max. Battery to AC Efficiency	96.0%			
MPPT Efficiency	99.9%			
Protection				
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	Optional			
DC Surge Protection	Type III			
AC Surge Protection	Type II			
Rapid Shutdown	Integrated			
General Data				
Operating Temperature Range (°C)	-35 ~ +60			
Relative Humidity	0 ~ 95%			
Max. Operating Altitude (m)	3000			
Cooling Method	Smart Fan Cooling			
User Interface	LCD, WLAN + APP			
Communication with BMS	CAN			
Communication	RS485, WiFi + bluetooth			
Communication Protocols	Modbus-RTU			
Weight (kg)	<13			
Dimension (W x H x D mm)	456 x 337 x 201			
Noise Emission (dB)	<35	<35	<55	<55
Ingress Protection Rating	IP66			
Mounting Method	Wall Mounted			

*1: When the input voltage is greater than 515 ~ 525V, the inverter will enter standby mode, and when the voltage returns to below 510V the inverter will return to normal operation.
*2: Please refer to the user manual for the MPPT Voltage Range at Nominal Power.
*3: The Max. Output Current in off-grid operation accounts for a three-phase maximum 150% unbalanced capability.
*: Please visit GoodWe website for the latest certificates.
*: As a part of our policy of continuous improvement, we reserve the right to alter design and specifications without further notice.

Preliminary

GoodWe-Single page-20260320-EN-D2.1 Information may be subject to change without notice during product improving.(draft version)