

GOODWE

EO Series

6kW | 1 MPPT | Single Phase
Off-grid Inverter

The GoodWe EO Series off-grid inverter is the ideal solution for those living in areas without power grids or experiencing frequent power outages. Its robust design guarantees durability even in harsh conditions, while the user-friendly setup minimizes installation costs. The inverter integrates dry contacts that can be connected to control loads and a generator, optimizing energy consumption and extending backup duration. It can operate with or without batteries and also allows multiple inverters to connect to a single battery system. Additionally, parallel connection is supported for expanded system capacity.



Integrated dry contacts for generator and load control



Compatible with lithium and lead-acid batteries



3-phase capability



Supports up to 3 units in parallel (18kW)

Technical Data

GW6000-EO

Battery Input

Battery Type	Lithium / Lead-acid
Nominal Battery Voltage (V)	48
Battery Voltage Range (V)	40~60
Start-up Voltage (V)	36
Number of Battery Input	1
Max. Continuous Charging Current (A)	120
Max. Continuous Discharging Current (A)	140
Max. Charging Power (W)	6000
Max. Discharging Power (W)	6700

PV Input

Max. Input Power (W)	6600
Max. Input Voltage (V)	500
MPPT Operating Voltage Range (V)	120 ~ 450
Start-up Voltage (V)	120
Nominal Input Voltage (V)	360
Max. Input Current per MPPT (A)	30
Max. Short Circuit Current per MPPT (A)	37.5
Number of MPP Trackers	1
Number of Strings per MPPT	2

AC input

Max. Apparent Power from Utility Grid (VA)	8050
Nominal Input Voltage (V)	220 / 230
Input Voltage Range (V)	90 ~ 280
Nominal Input Frequency (Hz)	50 / 60
Input Frequency Range (Hz)	45 ~ 65
Max. AC Current from Utility Grid (A)	35

AC Output

Nominal Apparent Power (VA)	6000
Nominal Output Power (W)	6000
Max. Output Apparent Power (VA)	6000 (12000 at 5sec)
Max. Output Current (A)	27.6 (52.2at 5sec)
Nominal Output Voltage (V)	220 / 230
Nominal Output Frequency (Hz)	50 / 60
Output THDv (@Linear Load)	<3%
Transfer time	<10ms typical; <20ms Max

AC Data (Generator)

Nominal Apparent Power from AC generator (VA)	6000
Max. Apparent Power from AC generator (VA)	8050
Nominal Input Voltage (V)	220 / 230
Input Voltage Range (V)	90 ~ 280
Nominal AC generator Frequency (Hz)	50 / 60
AC generator Frequency Range (Hz)	45 ~ 65
Max. AC Current From AC generator (A)	35
Nominal AC Current From AC generator (A)	26.1

Efficiency

Max. Efficiency	≥97.0%
European Efficiency	≥96.5%
Max. Battery to AC Efficiency	≥95.0%
MPPT Efficiency	≥99.5%

Protection

PV String Current Monitoring	Integrated
PV Insulation Resistance Detection	Integrated
Residual Current Monitoring	Integrated
Battery Reverse Polarity Protection	Integrated
AC Overcurrent Protection	Integrated
AC Short Circuit Protection	Integrated
AC Overvoltage Protection	Integrated
DC Surge Protection	Type III
AC Surge Protection	Type III
AFCI	Optional

General Data

Operating Temperature Range (°C)	-10 ~ +60
Relative Humidity	5 ~ 95% (Non-condensing)
Max. Operating Altitude (m)	<2000
Cooling Method	Smart Fan Cooling
User Interface	LED, LCD, USB, RS485, Dry-contact, WLAN + APP
Communication with BMS	RS485, CAN
Communication with Portal	WiFi / LAN / BLU
Weight (kg)	13
Dimension (W x H x D mm)	400 x 495 x 130
Topology	PV: Non-isolated; BAT: isolated
Self-consumption at Night (W)	15
No Load Power Consumption	≤30
Ingress Protection Rating	IP21
Mounting Method	Wall Mounted

*: Please visit GoodWe website for the latest certificates.