



The third generation of the GivEnergy Hybrid Inverter is a battery and solar inverter in one unit.

It can be coupled directly with solar panels to generate usable electricity in the property, as well as store any excess energy for later use in a battery. The Hybrid Inverter aims to minimise export by storing excess energy in the battery during generation hours. Additionally it will minimise import by discharging to meet demand in the property.



#### In-built WiFi and LAN

Includes in-built WiFi and LAN for a hard-wired network connection.



#### Higher Charge/Discharge Rate

Increased efficiency, higher discharge rates of up to 10kW.



#### Flexible Rate Tariff

Charge the battery off-peak when it's cleaner, greener and less costly then discharge the battery during peak times for maximum saving.



#### 12 Year Warranty

Supplied with a full manufacturer's warranty. Our UK team are on hand to help you should any issues arise.

# Hybrid Inverter 8.0

## Gen 3

### INPUT DATA (PV)

Max. DC Input Power	12000W
Start-up Voltage	80V
Max. PV Voltage	600V
MPPT Range	90V-550V
Nominal Voltage	230V
Max. Short Circuit Current	30A/30A
Max. Input Current (per string)	25A/25A
MPPT Tracker / No. of Strings per MPPT Tracker	2/2

### OUTPUT DATA (AC)

Nominal AC Output Power	10000W
Max. Apparent Power Output to Utility Grid	10000VA
Max. Output Current	46A
Nominal Voltage / Range	230VAC
Frequency Range	50 / 60 Hz; ±5 Hz
Power Factor (Full Load)	>0.99
Power Factor Range	0.8 Lagging... 0.8 Leading
THDI (Nominal Power)	<3%
AC Connection	Single Phase

### BATTERY

Battery Type	LiFePO <sub>4</sub>
Battery Voltage Range	120V - 600V
Nominal Voltage	340VDC
Charge* / Discharge Current	25A / 25A
Max. Charge / Discharge Power	8000W / 85000W
Communication Interface	CAN

### BACKUP TERMINAL PARAMETER (AC)

Nominal AC Output Power	8000W
Nominal Voltage	230VAC
Max. Output Current	37A
Nominal Frequency	50 Hz
Automatic Switch Time	10ms
THDv ( Linear Load)	<3%
Pass-through current	50A

## PROTECTION DEVICES

DC Reverse Polarity Protection	Yes
DC Switch Rating for each MPPT	Yes
Output Overcurrent Protection	Yes
Output Overvoltage Protection Varistor	Yes
Ground Fault Monitoring	Yes
Grid Monitoring	Yes
Max. Inrush Current	30A Peak
Max. Output Fault Current	40A Peak
Max. Output Overcurrent Protection	25A RMS
Earth Leakage Current Monitoring	Yes
AFCI	Yes

## GENERAL DATA

Dimensions	583H x 205D x 480W (mm)
Weight	32Kg
Charge / Discharge Efficiency	96% / 96%
PV Max. Efficiency	97.6%
Euro Efficiency	97%
MPPT Efficiency	99.9%
Protection Class	IP65
Noise Emission (Typical)	55dB
Operational Temperature	-25°C - 60°C
Relative Humidity	0 ~ 100%, non condensing
Altitude	4000m (derating above 2000m)
Inverter Topology	Transformerless
Self-Consumption	<15W

## FEATURES

Display LCD	LCD & APP
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## INTERFACE

Communication	EMS: RS485*2 Meter - RS485*2 Portal - WiFi (USB) or LAN
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## CERTIFICATES AND APPROVALS

G99,  
G100