



The GivEnergy Hybrid Inverter is a battery inverter and solar inverter in one unit.

It can be coupled directly with solar panels to generate usable electricity in the property, as well as storing 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.



### Remote Firmware

Control and monitor your Smart System on the move via our GivEnergy Monitoring App and Portal.



### New Solar Installations

Replace your old storage system with a brand new Smart System and gain the benefits of renewable energy.



### Flexible Rate Tariff

Charge from the grid at off-peak times when energy is cheaper, and discharge at peak times when energy is more expensive.



### 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 5.0 Gen 2

## INPUT DATA (PV)

Max. DC Input Power (per string)	7.5kWp
Start-up Voltage	150V
Max PV Voltage (per string)	580V DC
MPPT Range	150V-550V
Nominal Voltage	360V
Max. Short Circuit Current (per string)	20A
Max. Input Current	13A
Number of Independent MPPT Input	2/1

## OUTPUT DATA (AC)

Nominal AC Output Power	5000W
Max. Apparent Power Output to Utility Grid	5000VA
Max. Output Current	22.8A
Nominal Voltage / Range	230VAC - 270VAC
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 Output Topology	Single Phase

## BATTERY

Battery Type	Lithium-ion
Battery Voltage Range	45V - 58V
Nominal Voltage	51.2V
Charge* / Discharge Current	65A / 81A
Max. Charge / Discharge Power	3300W / 3600W
Communication Interface	RS485

## BACKUP TERMINAL PARAMETER (AC)

Nominal AC Output Power	3600W
Nominal Voltage	230Vac
Max. Output Current	16A
Nominal Frequency	50 Hz
Automatic Switch Time	10ms
THDv ( Linear Load)	<3%

\* Charge current increased to 70A via firmware update

## 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

## GENERAL DATA

Dimensions (HxDxW)	410H x 210D x 480W (mm)
Weight	27.5 Kg
Battery Charge / Discharge	94% / 94%
PV Max. Efficiency	97.60%
Euro Efficiency	97%
MPPT Efficiency	99.90%
Protection Class	IP65
Noise Emission (Typical)	<30dB
Operational Temperature	-20°C ~ +60°C (derating at 50°C)
Relative Humidity	0 ~ 100%
Altitude	4000m (derating above 2000m)
Inverter Topology	Transformerless
Self-Consumption	<5W

## FEATURES

Display LCD	LED & APP
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## INTERFACE

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

TÜV CE,  
TÜV IEC 62109-1&2,  
TÜV VDE 0126-1-1,  
TÜV AS4777&AS/NZS 3100,  
EN50549,  
SAA,  
G99,  
G100,