



# The 3 phase GivEnergy Hybrid Inverter is a battery inverter and solar inverter in one unit, meaning that the battery is AC and DC coupled.

It can be coupled directly with solar panels to generate usable electricity in the property, as well as store any excess energy in the battery for later use. It features easy plug and play installation and on / off grid phase balancing.

Additionally, it will minimise import by discharging to meet demand in the property with a discharge rate of up to 20kW.



#### In-built WiFi

Includes in-built WiFi network connection.



#### **Higher Charge/Discharge Rate**

Increased efficiency, higher discharge rates of up to 20kW.



#### **Flexible Rate Tariff**

Change 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 team are on hand to help you should any issues arise.

# 3 Phase Hybrid Inverter 20000W

#### INPUT DATA (PV)

Max. DC Input Power	30000W
Start-up Voltage	200V
Max PV Voltage	1000V
MPPT Range	200V - 850V
Nominal Voltage	600V
Max. Short Current (per string)	37.5A
Max. Input Current (per string)	30A
MPPT Tracker / No. of Strings per MPPT Tracker	2/2

#### **OUTPUT DATA (AC)**

Nominal AC Output Power	20000W
Max. Apparent Power Output to Utility Grid	20000VA
Max. Output Current	29A
Nominal Voltage / Range	400/380VAC, 3W/N/PE
Frequency Range	50 / 60 Hz; ±5Hz
Power Factor (Full Load)	>0.99
Power Factor Range	0.8 Lagging 0.8 Leading
THDI (Nominal Power)	<3%
AC Connection	Three Phase

#### **BATTERY**

Battery Type	LiFePO <sub>4</sub>
Battery Voltage Range	200VDC ~ 800VDC
Nominal Voltage	450VDC
Charge / Discharge Current	50A / 50A
Max. Charge / Discharge Power	20000W / 20000W
Communication Interface	CAN

# BACKUP TERMINAL PARAMETER (AC)

Nominal AC Output Power	20000W
Nominal Voltage	400 / 380VAC
Max. Output Current	29A
Nominal Frequency	50Hz
Automatic Switch Time	10ms
THDv ( Linear Load)	<3%
Pass through current	30A



### **GENERAL DATA**

Dimensions	658H x 214D x 480W (mm)
Weight	40.4kg
Charge / Discharge Efficiency	97.5% / 97%
PV Max. Efficiency	98%
Euro Efficiency	97.7%
MPPT Efficiency	99.9%
Protection Class	IP65
Noise Emission (Typical)	<30dB
Operational Temperature	-25~+60°C
Relative Humidity	0 ~ 100%, non condensing
Altitude	4000m (derating above 2000m)
Inverter Topology	Transformerless
Self-Consumption	<18W

# **FEATURES**

Display LCD	LED & APP	
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### **INTERFACE**

Communication	BMS: CAN
	Meter and EMS: RS485+2
	WiFi/LAN
	for remote monitoring

# CERTIFICATES AND APPROVALS

CE, UKCA, G99, G100/2,