Hybrid Inverter 5.0

Gen 3

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 3.6kW.

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

INPUT DATA (PV)

Max. DC Input Power (per string)	7.5kWp
Start-up Voltage	150V
Max. PV Voltage	580V
MPPT Range	120V-550V
Nominal Voltage	360V
Max. Short Circuit Current (per string)	20A
Max. Input Current (per string)	15A
MPPT Tracker / No. of Strings per MPPT Tracker	2/1

OUTPUT DATA (AC)

Nominal AC Output Power	5000W
Max. Apparent Power Output to Utility Grid	5200VA
Max. Output Current	21.7A
Nominal Voltage / Range	180VAC - 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 Connection	Single Phase

BATTERY

Battery Type	$LiFePO_4$
Battery Voltage Range	45V - 58V
Nominal Voltage	51.2VDC
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	588H x 214D x 480W (mm)
Weight	32Kg
Charge / Discharge Efficiency	94% / 94%
PV Max. Efficiency	97.6%
Euro Efficiency	97%
MPPT Efficiency	99.9%
Protection Class	IP65
Noise Emission (Typical)	<30dB
Operational Temperature	-20°C - 60°C with derating at 50°C
Relative Humidity	0 ~ 100%
Altitude	4000m (derating above 2000m)
Inverter Topology	Transformerless
Self-Consumption	<5W

FEATURES

Display LCD	LED & APP

INTERFACE

Communication	BMS: RS485 Meter - Meter: RS485 Portal - WiFi (USB) or LAN

CERTIFICATES AND APPROVALS

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

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