GivEnergy®

Home Energy Storage Systems

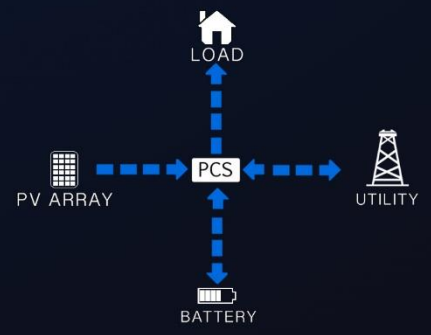
IVOLTZ.com

Hybrid System

Home Hybrid Inverter

- Compatible with GivEnergy $LiFePO_4$ battery packs
- Backup up power (2.5kW) output during a black out
- Installed to new builds or retrofit to an existing solar PV system
- IP65 water-resistant for exterior install
- Remote software updating via WiFi / 4G dongle
- Cloud based monitoring and control through web / app interface
- Batteries are able to charge directly from Solar PV and the Grid, Utilising a flexible energy tariff
- Available in 3.6kW & 5.0kW models

Dimensions (W/H/D)	480*440*260mm
Weight	24kg



GivEnergy®

Specification

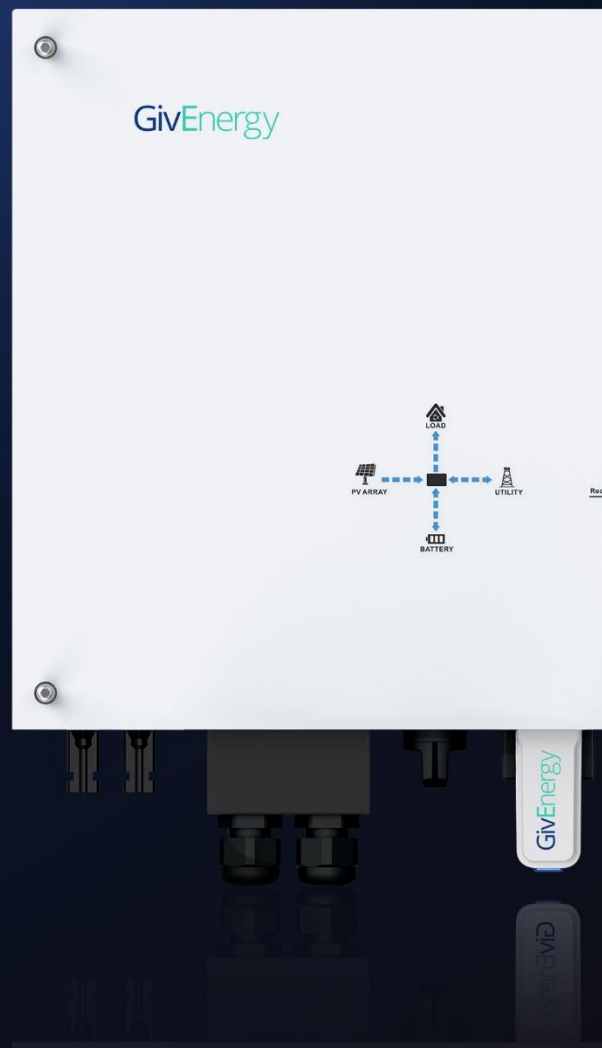
Hybrid
Giv-HY3.6 / Giv-HY5.0

Input Data (DC)	Giv-HY3.6	Giv-HY5.0
Max DC power	4500W	6500W
Max DC voltage	600V	
Start voltage	120V	
DC nominal voltage	360V	
PV voltage range	100V-600V	
MPPT voltage range	120V-550V	
Max input current per string of tracker A/tracker B	11A/11A	
Number of independent MPPT input	2	
Feedback current to the array	0A	

Output Data (AC)		
Nominal AC output power	3680W	5000W
Max AC apparent power	3680VA	5000VA
Max output current	16.4A	21.7A
AC nominal voltage; range	220V/230V/240V;180Vac-280Vac	
AC grid frequency; range	50,60Hz;±5 Hz	
Power factor at rated power	1	
Power factor	0.9leading...0.9lagging	
THDi	<3%	
AC connection	Single phase(can be linked for three phase)	

Battery	
Battery type	$LiFePO_4$
Nominal Power	2500W
Nominal voltage	51.2V
Battery capacity	⩾61.5Ah
Max discharging /charging power	2500W/2500W
Charging curve	3-stage adaptive with maintenance
Operating voltage range	46-57V
Max charging/discharging current	50A / 50A

Emergency Backup Power Output		
Output rated power	97.00%	97.10%
Output voltage	96.50%	96.50%
Maximun efficiency	99.50%	99.50%



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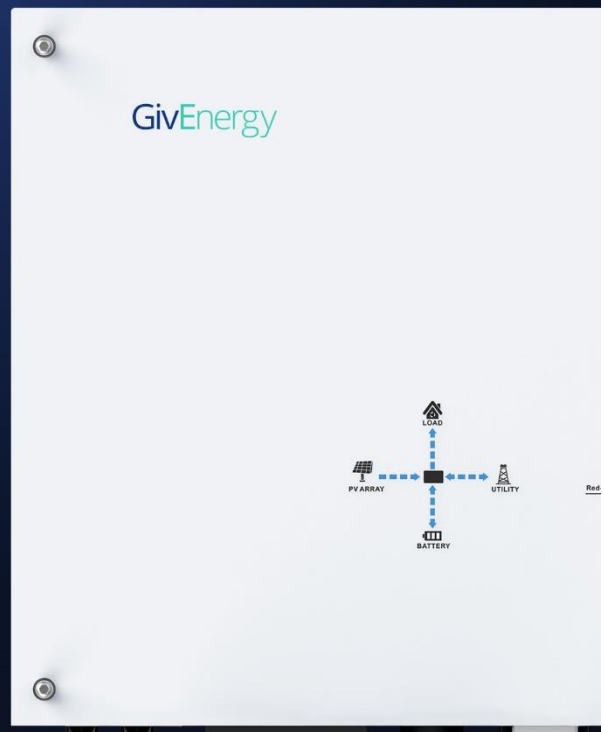

Protection Devices	Giv-HY3.6	Giv-HY5.0
DC reverse polarity protection	Yes	
DC switch rating for each MPPT	Yes	
Output over current protection	Yes	
Output overvoltage protection-varistor	Yes	
Ground fault monitoring	Yes	
Grid monitoring	Yes	
Max inrush current	30A peak	
Max output fault current	40A peak	
Max output overcurrent protection	25A rms	
Integrated all pole sensitive leakage current monitoring unit	Yes	

General Data	
Dimensions (W / H / D)	480*440*260mm
Weight	24kg
Operating temperature range	0°C-55°C (Ambient)
Noise emission (typical)	⩽ 6 dB(A)
Altitude	Up to 2000m(6560ft)Without power derating
Relative humidity	95%
Consumption: operating (standby) / night	<5W / < 0.5 W
Topology	Transformerless
Cooling concept	Natural
Environmental Protection Rating	IP65

Features	
PV connection	H4/MC4
Battery connection	Screw terminal
AC connection	Screw terminal
Display	LED
Interfaces:Wi-Fi/USB/GPRS/RS485/4G	Opt/Yes/Opt/Yes/Yes
Warranty: 5 years / 10 years / 15 years	Yes/Opt/Opt

Certificates and Approvals

TüV CE, TüV IEC 62109-1&2, TüV VDE 0126-1-1, TüV G83/2, TüV G59/3, TüV AS4777&AS/NZS 3100, EN50438, SAA, TüVG98/1-4:2019, G99

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