

## **Test Verification of Conformity**

## Verification Number: 180919085GZU-001

On the basis of the referenced test report(s), sample(s) tested of the below product have been found to comply with the standards harmonized with the directives listed on this verification at the time the tests were carried out. Other standards and Directives may be relevant to the product. This verification is part of the full test report(s) and should be read in conjunction with it <them>.

Once compliance with all product relevant mark directives are verified, including any relevant e.g. risk assessment and production control, the manufacturer may indicate compliance by signing a Declaration of Conformity themselves and applying the mark to products identical to the tested sample(s).

Applicant Name &

Address:

JMHing Power Ltd

Product Description:

Unit 10, Kelleythorpe Industrial Estate, Driffield, YO25 9DJ, United Kingdom

PV Hybrid Inverter

Ratings & Principle

Characteristics:

See Appendix to Test Verification of Conformity

Models/Type References:

Brand Name(s):

Giv-HY3.6, Giv-HY4.6, Giv-HY5.0

**Giv**Energy

Standard(s)/Directive(s):

IEC/EN 62109-1: 2010 Safety of power converters for use in photovoltaic

power systems – Part 1: General requirements

IEC/EN 62109-2: 2011 Safety of power converters for use in photovoltaic

power systems – Part 2: Particular requirements for inverters

Low Voltage Directive 2014/35/EU

Verification Issuing Office

Name & Address:

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China

Verification by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Test Report Number(s):

180919085GZU-001 180919085GZU-002

Additional information in Appendix.

**Signature** 

Name: Grady Ye Position: Manager Date: 20 Sep., 2018

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## **APPENDIX: Test Verification of Conformity**

This is an Appendix to Test Verification of Conformity Number: 180919085GZU-001

Ratings & Principle Characteristics:

Model	Giv-HY3.6	Giv-HY4.6	Giv-HY5.0
Widdel		GIV-1114.0	010-1113.0
May DV generator newer(M)	PV Input	F000	F400
Max. PV-generator power(W)	3800 100-600	5000 100-600	5400 100-600
PV-voltage range (d.c.V)	2*20	2*20	2*20
Isc PV (d.c.A)	2 20	2.50	2.50
MPPT voltage range (d.c.V)	120-550	120-550	120-550
Max. DC current (d.c.A)	2*11	2*11	2*11
E	nergy storage ports		
Battery rated Voltage (d.c.V)	48	48	48
Battery Voltage Range (d.c.V)	46.4-57.6	46.4-57.6	46.4-57.6
Max. battery charge/discharge current (d.c.A)	50	50	50
Max. battery charge/discharge power(W)	2500	2500	2500
Battery type	Lead- acid/Lithium	Lead- acid/Lithium	Lead- acid/Lithium
	AC output		
Nominal voltage (a.c.V)	230	230	230
Max. output current (a.c.A)	16.4	21.0	22.8
Grid frequency (Hz)	50	50	50
Max. AC output apparent power (VA)	3600	4600	5000
Power factor range	0.80i to 0.80c	0.80i to 0.80c	0.80i to 0.80c
	Battery Charging		
Grid Charging Voltage (a.c V)	230		
Grid Charging Frequency (Hz)	50		
Max Charging Current (a.c A)	11.0		
-	Other		
Inverter topology	Transformerless		
Protective class	I		
IP rating	IP 65		
Operation temp.	-25°C to +60°C		

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