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 CE 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 Unit 10, Kelleythorpe Industrial Estate, Driffield, YO25 9DJ, United Kingdom
Product Description:	PV Hybrid Inverter
Ratings & Principle Characteristics:	See Appendix to Test Verification of Conformity
Models/Type References:	Giv-HY3.6, Giv-HY4.6, Giv-HY5.0
Brand Name(s):	GivEnergy
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:	Intertek Testing Services Shenzhen Ltd. Guangzhou Branch Building C, 2nd Industrial Zone of Xia Shi Jia, Jiangshi Community, Gongming Sub-district, Guangming New District, Shenzhen, Guangdong, China
Test Report Number(s):	180919085GZU-001 180919085GZU-002

Additional information in Appendix.

Signature

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

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
PV Input			
Max. PV-generator power(W)	3800	5000	5400
PV-voltage range (d.c.V)	100-600	100-600	100-600
Isc PV (d.c.A)	2*20	2*20	2*20
MPPT voltage range (d.c.V)	120-550	120-550	120-550
Max. DC current (d.c.A)	2*11	2*11	2*11
Energy 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℃ to +60℃		