



## EN50438 DECLARATION for Ireland

Manufacturer	Name	NINGBO GINLONG TECHNOLOGIES CO., LTD.
	Address	NO. 57 JINTONG ROAD, BINHAI INDUSTRIAL PARK, XIANGSHAN, NINGBO, ZHEJIANG, 315712, CHINA
Product	Product Name	GRID-TIE PV INVERTER
	Model	SINGLE PHASE INVERTER: RHI-3K-48ES/ RHI-3.6K-48ES RHI-4.6K-48ES/ RHI-5K-48ES
Applicable Standard	EN50438 : 2007 for Ireland	

The product stated above have been achieved and processed to the fullness examination according to EN50438 : 2007 for Ireland.

Manufacture Stamp

Date and place of issue

Ningbo  
2018-9-12

宁波锦浪新能源科技有限公司  
NINGBO GINLONG TECHNOLOGIES CO., LTD.

Zhangkun

Information:

All modification should be confirmed by Ginlong, otherwise this declaration will no longer valid.

## Test result

### Test details

Name and address of test house	Ginlong technical Reserch and develop laboratory
Telephone number	(+86) 574 6578 1607
Date of test	12. Sep.2014

### Under-/Overfrequency tests

Parameter	Underfrequency		Overfrequency	
	Frequency	Time	Frequency	Time
Protection limit	48 Hz	0.5 s	50.5 Hz	0.5 s
Actual setting	48 Hz	0.3 s	50.5 Hz	0.3 s
Trip value (test result)	48.04 Hz	0.35 s	50.54 Hz	0.34 s

### Under-/Overvoltage tests (single-stage protection)

Parameter	Undervoltage		Overvoltage	
	Voltage	Time	Voltage	Time
Protection limit	207 V	0.5 s	253 V	0.5 s
Actual setting	207 V	0.4 s	253 V	0.4 s
Trip value (test result)	207.05 V	0.42 s	253.05 V	0.44 s

### LoM test

Parameter	Neg. gradient		Pos. gradient	
	Min.	Time	Max	Time
Protection limit	-0.4 Hz/s	0.5 s	+0.4 Hz/s	0.5 s
Actual setting	-0.4 Hz/s	0.4 s	+0.4 Hz/s	0.4 s
Trip value (test result)	-0.4 Hz/s	0.42 s	+0.4 Hz/s	0.41 s