



## APPENDIX 2 Type Test Certification Test Result Sheet

### Grid-tied Inverter Details:

Manufacturer Samil Power Co., Ltd.  
Address No.6 Xuefengshan Road, Suqian High-tech Industrial Development  
Zone, Jiangsu Province, P. R. China  
Postal code 223800  
Country P. R. China  
Phone +86-510-83593132

Test house Details Samil Power Co., Ltd.  
Date of test 2014/07/02  
Signature

山亿新能源股份有限公司  
SAMIL POWER CO., LTD.

Type reference	Max AC power	Nominal AC power
SolarRiver 1100TL	1000 W	1000 W
SolarRiver 1600TL	1500 W	1500 W



**Test Results:**

**Power Quality**

Harmonic current emissions as per EN 61000-3-2 Class A									
Harmonic		2nd	3rd	5th	7th	9th	11th	13th	15th ... 39th
EN 61000-3-2 Limit [A]		1.08	2.30	1.14	0.77	0.40	0.33	0.21	0.15 x (15/n)
Test Values [A] (at rated power)	SolarRiver 1100TL	0.03	0.06	0.04	0.04	0.04	0.04	0.03	0.03
	SolarRiver 1600TL	0.03	0.06	0.05	0.05	0.04	0.05	0.04	0.05

Voltage fluctuations and flicker as per EN 61000-3-3				
	Starting	Stopping	Running (at rated power)	
EN 61000-3-3 Limit	4%	4%	$P_{st} = 1.0$	$P_{lt} = 0.65$
Test Value	0.37%	0.44%	0.164	0.085

Power Factor			
Protection Limit	0.95 lag – 0.95 lead at three voltage levels		
Test level (AC voltage)	210 V	230 V	250 V
Test value (at rated power)	0.998	0.996	0.995

**Grid Monitoring**

Under / Over Voltage Test				
	Under Voltage		Over Voltage	
Parameter	Voltage	Time	Voltage	Time
Protection limit	207 V	0.5 s	253 V	0.5 s
Actual setting	209 V	---	251 V	---
Trip value	208.8 V	0.44 s	251.9 V	0.44s



Under / Over Frequency Test				
	Under Frequency		Over Frequency	
Parameter	Frequency	Time	Frequency	Time
Protection limit	47 Hz	0.5 s	51 Hz	0.5 s
Actual setting	47 Hz	---	50.5 Hz	---
Trip value	47.01 Hz	0.47 s	50.5 Hz	0.44 s

LoM Test			
Method used	Frequency Shift		
Output Power %	10%	50%	100%
Trip Setting	---	---	---
Trip Value	0.15 s	0.18 s	0.11 s

### Fault Level Contribution

Fault Level Contribution	
Device	Max Short Circuit Current
SolarRiver 1100TL	9.5 A
SolarRiver 1600TL	14.5 A

### Comments

These tests have been carried out with specifications and parameters set to meet the requirements of CER/01/190. It is hereby declared by the manufacturer that all units shipped to Ireland will have identical parameter settings and that these parameters cannot be changed by a user, installer or by any person other than the manufacturer.