



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 2015/03/25
Signature

山东新能源股份有限公司
SAMIL POWER CO., LTD.

Type reference	Max AC power	Nominal AC power
SolarRiver 1100TL-S	1000W	1000W
SolarRiver 1600TL-S	1500W	1500W
SolarRiver 2100TL-S	2000W	2000W
SolarRiver 2600TL-S	2500W	2500W



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-S	0.081	0.045	0.031	0.014	0.006	0.003	0.001	0.001
	SolarRiver 2600TL-S	0.132	0.096	0.051	0.023	0.012	0.008	0.003	0.003

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	0.24%	0.24%	0.173	0.207

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	0.998	0.998

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	208 V	---	252.0 V	---
Trip value	208.6V	0.062 s	252.8 V	0.060 s



Under / Over Frequency Test				
	Under Frequency		Over Frequency	
Parameter	Frequency	Time	Frequency	Time
Protection limit	48 Hz	0.5 s	50.5 Hz	0.5 s
Actual setting	48 Hz	---	50.5 Hz	---
Trip value	48 Hz	0.076 s	50.51 Hz	0.051 s

LoM Test			
Method used	Frequency Shift		
Output Power %	10%	50%	100%
Trip Setting	---	---	---
Trip Value	0.204 s	0.179 s	0.137 s

Fault Level Contribution

Fault Level Contribution	
Device	Max Short Circuit Current
SolarRiver 1100TL-S	6.4
SolarRiver 1600TL-S	9.6
SolarRiver 2100TL-S	12.9
SolarRiver 2600TL-S	16.1



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.