

TEST REPORT

Applicant : Shenzhen SOFARSOLAR Co., Ltd.
Address : 401, Building 4, AnTongDa Industrial Park, District 68, XingDong Community, XinAn Street, BaoAn District, Shenzhen, Guangdong, P.R.China

Report No : 210526217GZU-004 **Issue Date** : 29 Jul 2021

Sample Description

Name of Sample : Solar Grid-tied Inverter
Model Number : SOFAR 7KTLM-G3, SOFAR 8KTLM-G3, SOFAR 9KTLM-G3, SOFAR 10KTLM-G3, SOFAR 10.5KTLM-G3
Quantity of Sample(s) : 1
Date of Receival : 16 Jul 2021
Date of test Conducted : 16 Jul 2021

Test

Test Requested : IP65
Test Method : Refer to IEC/EN 62109-1:2010 (First Edition) clause 6.3
Test Observation: : See appendix test condition for details
Test Conclusion: : **Pass**
Other information : --
Remark :

- This test report is only for evaluation of the specified standard clauses listed in Test Requested.
- When determine the test result, measurement uncertainty has been considered.

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Tested by:

Approved by:

Gaison Li
Engineer

Jason Fu
Supervisor

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Rating

MODEL	SOFAR 7KTLM-G3	SOFAR 8KTLM-G3	SOFAR 9KTLM-G3
Input (DC)			
Max. input voltage	600V		
MPPT operating voltage range	80V~550V		
Max. input current	20A/16A/16A		
Max. input short circuit current per MPPT	30A/25A/25A		
Output (AC)			
Rated power	7000W	8000W	9000W
Rated Apparent power	7000VA	8000VA	9000VA
Max. AC power	7700VA	8800VA	9900VA
Rated output current	30.4A	34.8A	39.1A
Max output current	35.0A	40.0A	45.0A
Nominal grid voltage	230Vac		
Nominal frequency	50Hz		
Power factor	1 default (+/-0.8 adjustable)		
Ambient temperature range	-30~+60°C		
Degree of protection	IP65		
Software Version	V000001		
MODEL	SOFAR 10KTLM-G3	SOFAR 10.5KTLM-G3	
Input (DC)			
Max. input voltage	600V		
MPPT operating voltage range	80V~550V		
Max. input current	20A/16A/16A		
Max. input short circuit current per MPPT	30A/25A/25A		
Output (AC)			
Rated power	10000W	10500W	
Rated Apparent power	10000VA	10500W	

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Max. AC power	10000VA	10500W
Rated output current	43.5A	45.6A
Max output current	46.0A	46.0A
Nominal grid voltage	230Vac	
Nominal frequency	50Hz	
Power factor	1 default (+/-0.8 adjustable)	
Ambient temperature range	-30~+60°C	
Degree of protection	IP65	
Software Version	V000001	

Difference of the models:

All models have identical mechanical and electrical construction except some parameter of the software architecture in order to control the max output power. The detailed difference as following:

MODEL		SOFAR 7KTLM-G3	SOFAR 8KTLM-G3	SOFAR 9KTLM-G3	SOFAR 10KTLM-G3	SOFAR 10.5KTLM-G3
ITEM		17.5kg		18.5kg		
Component	Inverter inductor	232.5uH±10%/NPU226075 *2/φ2.0*3/26Ts 2 pcs		165.6uH±10%/NPH226060 *3/φ2.1*3/20Ts 2 pcs		
	Bus cap	315V/1000uF *10 pcs		315V/1000uF *14 pcs		
	INV IGBT	40A/650V *8 pcs		75A/650V *8 pcs		

Appendix test condition:

Number	Test items	Test condition	Test result
<u>1</u>	IP6X	The enclosure under test is supported inside the test chamber and the pressure inside the enclosure is maintained below the surrounding atmospheric pressure by a vacuum pump, The suction connection shall be made to a hole specially provided for the test.	No deposit of dust is observable inside the enclosure.
<u>2</u>	IPX5	Internal diameter of the nozzle: 6.3 mm Delivery rate: 12.5 L/min Core of the substantial stream: circle of approximately 40 mm diameter at 2.5 m distance from nozzle Test duration: 3 min Distance from nozzle to enclosure surface: between 2.5 m and 3 m.	No water inside the enclosure

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Appendix Photos:



Top view



Bottom view

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Appendix Photos:



Test setup of IP6X



Test setup of IPX5

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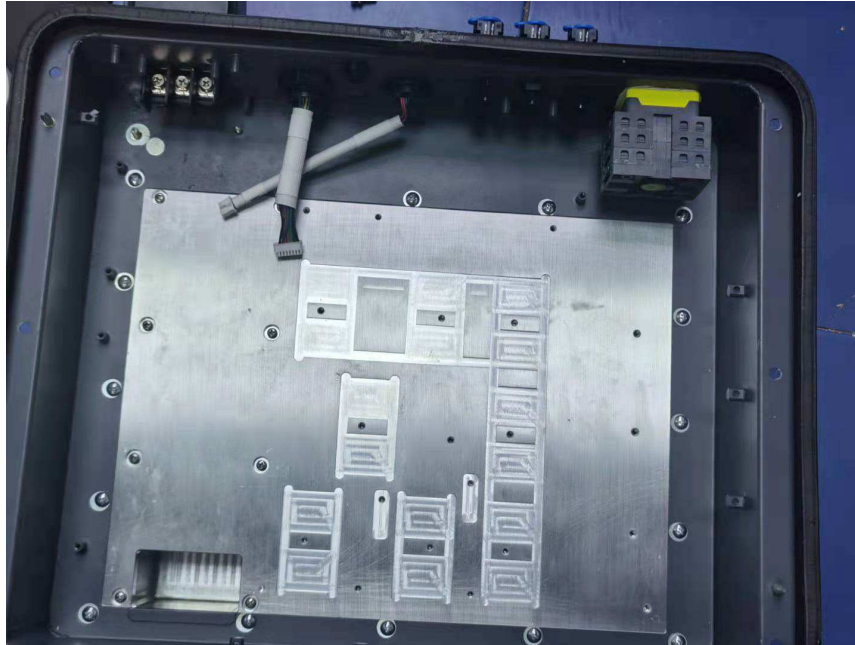
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Appendix Photos:



Checked after test finish

*****End of report*****