

EMC - TEST REPORT

Report Number	:	68.760.20.0930.01	Date of Issue:	2020-10-23
Model	:	SUN2000-15KTL-M3, SUN2000-17KTL-M3, SUN2000-20KTL-M3, SUN2000-23KTL-M3, SUN2000-29.9KTL-M3, SUN2000-30KTL-M3, SUN2000-36KTL-M3, SUN2000-40KTL-M3		
Product Type	:	Solar Inverter		
Applicant	:	Huawei Technologies Co., Ltd.		
Address	:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C		
Manufacturer	:	Huawei Technologies Co., Ltd.		
Address	:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C		
Test Result	:	<input checked="" type="checkbox"/> Positive <input type="checkbox"/> Negative		
Total pages including Appendices	:	73		

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1 Report Version

Issue	Description of Change	Date of Issue
1	First Issue	2020-10-23






2 General Information

2.1 Notes

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Prepared by Project Manager	2020-10-23 Date	Dawi Xu Name	 Signature <div style="text-align: right;">  </div>
Approved by Project Manager	2020-10-23 Date	Jessie He Name	 Signature



2.2 Applied Standard

Applied Product Standard:	CISPR 11:2015+A1:2016/ EN55011:2016*
	CISPR 11:2015+A1:2016+A2:2019/EN 55011:2016+A1:2017*
	IEC 62920:2017/ EN 62920:2017*
	IEC 61000-6-1:2005/EN 61000-6-1:2007
	IEC 61000-6-1:2016/EN IEC 61000-6-1:2019
	IEC 61000-6-2:2005/EN 61000-6-2:2005
	IEC 61000-6-2:2016/EN IEC 61000-6-2:2019
	IEC 61000-3-11:2000/EN 61000-3-11:2000
	IEC 61000-3-11:2017/EN IEC 61000-3-11:2019
	IEC 61000-3-12:2011/EN 61000-3-12:2011
The manufacture specific requirements	ETSI EN 301 489-1 V2.2.3:2019*
	ETSI EN 301 489-17 V3.2.4:2020*
Test Methods:	IEC 61000-6-3:2006+A1:2010/EN 61000-6-3:2007+A1:2011**
	IEC 61000-6-4:2006+A1:2010/EN 61000-6-4:2007+A1:2011**
	IEC 61000-6-4:2018/EN IEC 61000-6-4:2019**
	IEC 61000-4-2:2008
	IEC 61000-4-3:2010
	IEC 61000-4-4:2012
	IEC 61000-4-5:2014+A1:2017
IEC 61000-4-6:2013	
Remark:	IEC 61000-4-8:2009
	IEC 61000-4-34:2009
	<ol style="list-style-type: none"> the output voltages 254Vac/440Vac,3W+PE and 277Vac/480Vac,3W+PE of product are only applicable to medium-voltage grid connection scenarios and non-low-voltage grid connection scenarios (industrial environment); *According to EN 303 446-2 V1.2.1 (2019-10) Clause 4.2.1 & 4.2.2, For radiated emissions and conducted emissions, the EUT shall be assessed against the applicable non-radio EMC standard(s) as listed in clause 2.1.3 of EN 303 446-2. The exclusion band(s) defined in the applicable radio EMC standard(s) listed in clause 2.1.2 of EN 303 446-2 shall be applied. So EUT was assessed radiated emissions and conducted emissions with standards CISPR 11 and IEC 62920 for the non-radio function. The product exclusion band(s) is (WLAN: 2280MHz-2603.5MHz). Only the Telecommunication/network port limit is met.

2.3 Test Location

Test Location 1:	Reliability Laboratory of Huawei Technologies Co., Ltd.
Address:	No.2222, Xin Jinqiao Road, Pudong New Area, Shanghai, 201206, P.R.C
Test Location 2:	Shanghai Electrical Apparatus Research Institute(Group)Co, Ltd.
Address:	505# Wuning Road, Shanghai, China. Pd code 200063

2.4 Details of Applicant

Applicant:	Huawei Technologies Co., Ltd.
Address:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Product Name:	Solar Inverter
Product Model:	SUN2000-15KTL-M3, SUN2000-17KTL-M3, SUN2000-20KTL-M3, SUN2000-23KTL-M3, SUN2000-29.9KTL-M3, SUN2000-30KTL-M3, SUN2000-36KTL-M3, SUN2000-40KTL-M3

2.5 Application Details

Date of Receipt Test Item:	2020-05-26
Start Date of Test:	2020-05-26
End Date of Test:	2020-10-10

2.6 Test Environment Condition

Ambient Temperature:	22~26°C
Relative Humidity:	40~57%
Atmospheric Pressure:	100.5~101.6kPa

3 Summary of Test Results

Table 1 Test summary

EUT Classification: Radio Equipment				
Test Items	Test Configuration	Limit or Performance Criteria	Test Result	Location
<u>Radiated Emissions</u> Enclosure Port	TC1(TM1-TM5)	Class A or B	Pass	Location1
<u>Conducted Emissions</u> <input checked="" type="checkbox"/> DC Input Power Port <input checked="" type="checkbox"/> AC Output Power Port <input checked="" type="checkbox"/> Wired network Ports	TC1(TM1-TM5)	Class A or B	Pass	Location1
<u>Current Harmonics Emissions</u> AC Power Port	TC1(TM1-TM5)	Refer to section 11.3	Pass	Location1
<u>Voltage Fluctuations and Flickers</u> AC Power Port	TC1(TM1-TM5)	Refer to section 11.4	Pass	Location1
<u>Electrostatic Discharge</u> Enclosure Port	TC1(TM1-TM5)	B	Pass	Location1
<u>Immunity to Radiated Electromagnetic Fields</u> Enclosure Port	TC1(TM1-TM5)	A	Pass	Location1
<u>Immunity to Electrical Fast Transient Bursts</u> <input checked="" type="checkbox"/> Outdoor Signal Port <input type="checkbox"/> Indoor Signal Port <input checked="" type="checkbox"/> AC Output Power Port <input checked="" type="checkbox"/> DC Input Power Port	TC1(TM1-TM5)	B	Pass	Location1
<u>Immunity to Surges</u> <input checked="" type="checkbox"/> Outdoor Signal Port <input type="checkbox"/> Indoor Signal Port <input checked="" type="checkbox"/> AC Output Power Port <input checked="" type="checkbox"/> DC Input Power Port	TC1(TM1-TM5)	B	Pass	Location1
<u>Immunity to Continuous Conducted Interference</u> <input checked="" type="checkbox"/> Outdoor Signal Port <input type="checkbox"/> Indoor Signal Port <input checked="" type="checkbox"/> AC Output Power Port <input checked="" type="checkbox"/> DC Input Power Port	TC1(TM1-TM5)	A	Pass	Location1
<u>Immunity to Power Frequency Magnetic Field</u> Enclosure Port	TC1(TM1-TM5)	A	Pass	Location1
<u>Immunity to Voltage Dips and Short Interruption</u> AC Power Port	TC1(TM1-TM4)	B/B/C/C/C	Pass	Location2
Note: 1. Measurement taken is within the uncertainty of measurement system. 2. TC is short for test configuration. 3. <input checked="" type="checkbox"/> The item has been tested; <input type="checkbox"/> The item has not been tested or not applicable.				