

Technical Report No.: 64.290.22.31367.01

Date: 2023-03-16

Client: Huawei Technologies Co., Ltd
Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, Guangdong, 518129, China

Factory: Jiancheng Hengrui (Huizhou) Electronic Co., Ltd.
Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, Guangdong, 518129, China
Dongguan Yang Tian Electronic Technology Co., Ltd.(i-Brights)
No.152, Luyuan Rd., Keyuancheng, Tangxia Town 523710
Dongguan City, Guangdong Province PEOPLE'S REPUBLIC OF CHINA

Test object: Product: Converter (Solar inverter)
Model: SUN2000-330KTL-H1, SUN2000-330KTL-H2

Test specification: G99/1-6: 2020

Purpose of examination: • Testing and evaluation according to the test specification

Test result: The test results show that the presented product is in compliance with the above listed test specifications.

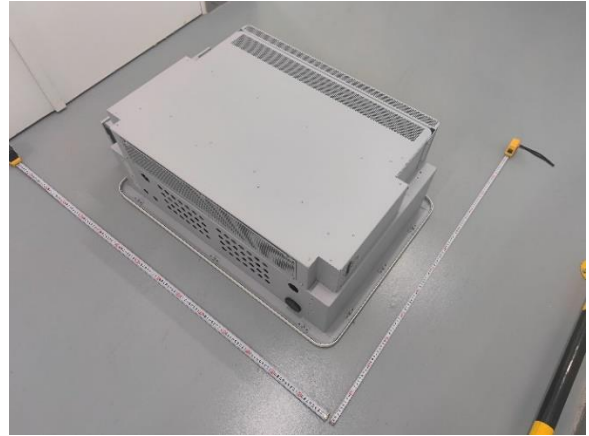
Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question. It does not imply a general statement regarding the quality of products from regular production. For further details please see testing and certification regulation, chapter A-3.4.

1. Description of the test object

1.1 Picture(s)



Front view



Back view



Right side view



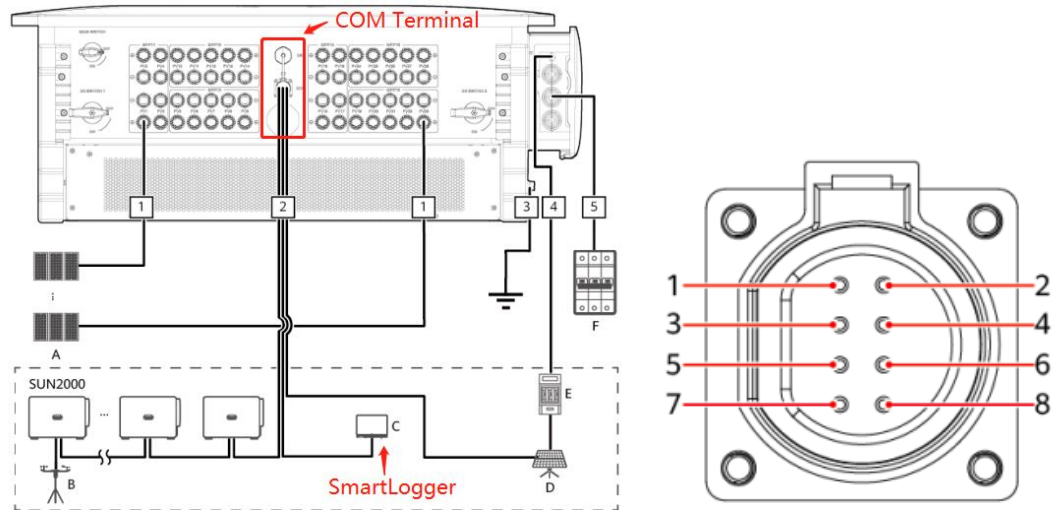
Left side view



AC side terminal block



DC side terminal block



Port	Pin	Definition	Pin	Definition	Description
RS485-1	1	RS485A IN, RS485 differential signal+	2	RS485A OUT, RS485 differential signal+	Used to cascade SUN2000s or connect devices such as the SmartLogger.
	3	RS485B IN, RS485 differential signal-	4	RS485B OUT, RS485 differential signal-	
PE	5	PE, shield layer grounding	6	PE, shield layer grounding	-
RS485-2	7	RS485A, RS485 differential signal+	8	RS485B, RS485 differential signal-	Used to connect an RS485 slave device.

(7) The setting of type B, type C and type D can be selected by the DNO on the software.

1.3 Consideration of the foreseeable use







- Not applicable
- Covered through the applied standard
- Covered by the following comment*
- Covered by attached risk analysis

1.4 Technical Data

Model	SUN2000-330KTL-H1	SUN2000-330KTL-H2
PV input rating		
Rated input voltage	1080 Vd.c.	
Max. input voltage	1500 Vd.c.	
MPPT voltage range (full load)	500 - 1500 Vd.c.	
Max. input current	65 Ad.c. x 6	
I _{sc} PV	115 Ad.c. x 6	
Grid output rating		
Max. output apparent power	330 kVA	

Registered Capacity output active power	300 kW	275 kW
Rated output voltage	800 Va.c., 3~ PE	
Rated output current	216.6 Aa.c.	198.5 Aa.c.
Max. continuous output current	238.2 Aa.c.	
Rated output frequency	50 Hz	
Power factor range	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)	
Reactive power setting range	-198~198 kVar	

1.5 Rating Label

 <p>型号 Model: SUN2000-330KTL-H1 名称 Name: 太阳能光伏逆变器 SOLAR INVERTER</p> <p>最大输入电压 d.c.Max.Input Voltage: 1500 Vd.c. 最大输入电流 d.c.Max.Input Current: 6×65 A 输入短路电流 Isc: 6×115 A</p> <p>MPP电压范围 d.c.MPP Range: 500 – 1500 Vd.c. 输出电压 a.c.Output Nominal Voltage: 800 Va.c; 3 ~ + ⊕ 输出频率 a.c.Nominal Operating Frequency: 50 Hz/60Hz 额定输出功率 a.c.Output Rated Power: 300 kW 最大视在功率 a.c.Output Max.Apparent Power: 330 kVA 最大输出电流 a.c.Output Max.Current: 238.2 A 功率因数 Power Factor: 0.8(lagging) – 0.8(leading) 温度范围 Operating Temperature Range: - 30 – + 60 °C 逆变器拓扑 Inverter Topology: Non – Isolation 防护等级 Enclosure: IP66 保护等级 Protection Class: I 过电压类别 Overvoltage Category: II (DC)/III(AC) 污染等级 Pollution Degree: III 工作海拔 Operating Altitude: 5000 m 通讯方式 Communication: MBUS/RS485</p> <p>合格证 QC PASS</p>   <p>华为技术有限公司 HUAWEI TECHNOLOGIES CO., LTD. 中国制造 MADE IN CHINA HQ of Huawei, Bantian, Longgang District, Shenzhen, 518129, P.R.C</p>	 <p>型号 Model: SUN2000-330KTL-H2 名称 Name: 太阳能光伏逆变器 SOLAR INVERTER</p> <p>最大输入电压 d.c.Max.Input Voltage: 1500 Vd.c. 最大输入电流 d.c.Max.Input Current: 6×65 A 输入短路电流 Isc: 6×115 A</p> <p>MPP电压范围 d.c.MPP Range: 500 – 1500 Vd.c. 输出电压 a.c.Output Nominal Voltage: 800 Va.c; 3 ~ + ⊕ 输出频率 a.c.Nominal Operating Frequency: 50 Hz/60Hz 额定输出功率 a.c.Output Rated Power: 275 kW 最大视在功率 a.c.Output Max.Apparent Power: 330 kVA 最大输出电流 a.c.Output Max.Current: 238.2 A 功率因数 Power Factor: 0.8(lagging) – 0.8(leading) 温度范围 Operating Temperature Range: - 30 – + 60 °C 逆变器拓扑 Inverter Topology: Non – Isolation 防护等级 Enclosure: IP66 保护等级 Protection Class: I 过电压类别 Overvoltage Category: II (DC)/III(AC) 污染等级 Pollution Degree: III 通讯方式 Communication: MBUS/RS485</p> <p>合格证 QC PASS</p>   <p>华为技术有限公司 HUAWEI TECHNOLOGIES CO., LTD. 中国制造 MADE IN CHINA HQ of Huawei, Bantian, Longgang District, Shenzhen, 518129, P.R.C</p>
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2. Order

2.1 Date of Purchase Order, Customer's Reference

2022-10-13

2.2 Test Sample(s)

- Reception date(s): 2022-10-22
- Location(s) of reception: TÜV SÜD Testing Center, D1 building, No. 63 Chuangqi Road, Shilou Town, Panyu District, Guangzhou 511447, P.R. China
- Condition of test sample(s): Intact

2.3 Date(s) of Testing

2022-10-22 to 2023-02-20

2.4 Location(s) of Testing

TÜV SÜD Testing Center, D1 building, No. 63 Chuangqi Road, Shilou Town, Panyu District, Guangzhou 511447, P.R. China

2.5 Points of Non-Compliance or Exceptions of the Test Procedure

- None

3. Test Results

- Decision rule according to IEC Guide 115:2021, clause 4.4.3, 4.5.1 was applied.

3.1 Positive Test Results

Test specification(s)	Report no. / Rev. No.	Date	Remark
Grid code compliance:	64.290.22.31367.01	2023-03-16	-

4. Remarks

4.1 General

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

5. Documentation

N/A

6. Summary

The test specifications are met.

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
TÜV SÜD Group

Tested by:

Giesen Wan, Charlie Yang

Giesen Wan Charlie Yang

printed name, function & signature

Approved by:

Yuneng Chen

Yuneng Chen

printed name, function & signature



--- End of Report ---