

Technical Report No.: 64.290.22.31560.01

Date: 2023-02-16

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

Factory: Dongguan Yangtian Electron Technology Co., Ltd
No.152, Luyuan Road, Tangxia Town, Dongguan City, Guangdong Province, China

Test object: Product: Solar Inverter
Model: SUN2000-100KTL-M2, SUN2000-115KTL-M2

Test specification: P.O. 12.3:2006
PVVC:2018

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

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

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1.2 Function

Manufacturer's specification for intended use:

- (1) In order to protect the generator, user and installer, external AC circuit breaker shall be equipped at the end-use application.
- (2) Software version: SUN2000ME V500R023C00SPC040, Firmware version: V500R023.
- (3) The inverters are designed for floor standing and fixed mounted on the floor.


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	SUN2000-100KTL-M2	SUN2000-115KTL-M2
PV terminal parameters		
V _{max} PV	1100 Vd.c.	
PV input operating voltage range	200 - 1000 Vd.c.	
MPPT voltage range(full load)	540 - 800 Vd.c.	
I _{sc} PV	10 x 40 Ad.c.	
Grid terminal parameters		
Nominal a.c. output voltage	230/400 Va.c., 3/N/PE	
Nominal a.c. output frequency	50 Hz	
Nominal a.c. output current	144.4 Aa.c.	166.0 Aa.c.
Maximum continuous a.c. output current	160.4 Aa.c.	182.3 Aa.c.
Nominal a.c. output power	100 kW	115 kW
Maximum continuous a.c. output power	110 kW	125 kW
Maximum a.c. output apparent power	110 kVA	125 kVA
Power factor	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)	

1.5 Rating Label

 HUAWEI	型号 Model: SUN2000-100KTL-M2 名称 Name: 太阳能光伏逆变器 SOLAR INVERTER
最大输入电压 d.c.Max.Input Voltage: 1100 Vd.c. 最大输入电流 d.c.Max.Input Current: 10x30 A 输入短路电流 Isc: 10x40 A MPPT电压范围 d.c. MPPT Range: 200 – 1000 Vd.c. 输出电压 a.c. Output Nominal Voltage: 380/400 Va.c., 3(N)~+⊕ 480 Va.c., 3~+⊕ 输出频率 a.c. Nominal Operating Frequency: 50/60 Hz 额定输出功率 a.c. Output Rated Power: 100 kW 最大视在功率 a.c. Max.Output Apparent Power: 110 kVA 最大输出电流 a.c. Max.Output Current: 168.8 A; 380 Va.c. 160.4 A; 400 Va.c. 133.7 A; 480 Va.c. 功率因数 Power Factor: 0.8(lagging) - 0.8(leading) 温度范围 Operating Temperature Range: - 25 – + 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 海拔 Altitude: 4000 m 通讯方式 Communication: RS485 电弧故障保护 AFCI: TYPE I	
 	
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 HUAWEI	型号 Model: SUN2000-115KTL-M2 名称 Name: 太阳能光伏逆变器 SOLAR INVERTER
最大输入电压 d.c.Max.Input Voltage: 1100 Vd.c. 最大输入电流 d.c.Max.Input Current: 10x30 A 输入短路电流 Isc: 10x40 A MPPT电压范围 d.c. MPPT Range: 200 – 1000 Vd.c. 输出电压 a.c. Output Nominal Voltage: 400 Va.c., 3(N)~+⊕ 480 Va.c., 3~+⊕ 输出频率 a.c. Nominal Operating Frequency: 50/60 Hz 额定输出功率 a.c. Output Rated Power: 115 kW 最大视在功率 a.c. Max.Output Apparent Power: 125 kVA 最大输出电流 a.c. Max.Output Current: 182.3 A; 400 Va.c. 151.9 A; 480 Va.c. 功率因数 Power Factor: 0.8(lagging) - 0.8(leading) 温度范围 Operating Temperature Range: - 25 – + 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 海拔 Altitude: 4000 m 通讯方式 Communication: RS485	
 	
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2. Order

2.1 Date of Purchase Order, Customer's Reference

2022-11-17

2.2 Test Sample(s)

- Reception date(s): 2022-12-08
- 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

2022-12-08 to 2023-01-25

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	64.290.22.31560.01	2023-02-16	-

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

- None

6. Summary

The test specifications are met.

Technical Report



Product Service

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

Tested by: Yuneng Chen *Yuneng Chen*
printed name, function & signature

Approved by: Jinjing Peng *Peng Jinjing*
printed name, function & signature



--- End of Report ---

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