

Appendix

Extract from test report according to EN 50549-1

Nr. 19TH0506-EN50549-1_0

Type Approval and declaration of compliance with the requirements of EN 50549-1.

Manufacturer / applicant:	Huawei Technologies Co., Ltd. Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129 P.R.C
Micro-generator Type	Grid-tied photovoltaic inverter
Rated values	SUN2000-100KTL-M1
MPP DC voltage range [V]	200-1000
Input DC voltage range [V]	200-1100
Input DC current [A]	Max. 26A*10
Output AC voltage [V]	Max. 160.4 A (400 Vac); Max. 133.7 A (480 Vac)
Output AC current [kW]	100
Output power [kVA]	110
Firmware version	V500R001
Measurement period:	2019-09-30 to 2019-10-22

Description of the structure of the power generation unit:

The power generation unit is equipped with a PV and line-side EMC filter. The power generation unit has no galvanic isolation between DC input and AC output. Output switch-off is performed with single fault tolerance based on two series-connected relays in line and neutral. This enables a safe disconnection of the power generation unit from the network in case of error.

Setting of the interface protection:

Parameter	Max. disconnection time	Min. operate time	Trip value
Over voltage (stage 1) ^a	0,5 s	-	230V +10% (253V)
Over voltage (stage 2)	0,2s	0,1s	230V +15% (264,5V)
Under voltage	1,5 s	1,2 s	230V -15% (195,5V)
Over frequency	0,5 s	0,3 s	50Hz +4% (52 Hz)
Under frequency	0,5 s	0,3 s	50Hz -5% (47,5 Hz)
Reconnection settings for voltage	0,85Un (195,5V) ≤ U ≤ 1,10Un (253V)		
Reconnection settings for frequency	49,5 Hz ≤ f ≤ 50,1 Hz		
Reconnection time	≥ 60 s		
Active power gradient after reconnection	10% P _{E_{max}} / per minute		
Permanent DC-injection	0,5% of rated inverter output current or 20mA		
Loss of mains according EN 62116 (LoM)	2,0 s		

Note:

^a Over voltage – stage1: 10 min-mean-value corresponding to EN 50160.

Default interface setting according to EN 50438:2013 are used. Interface protection setting are password protected adjustable.

The above stated generators are tested according to the requirements in the EN 50549-1:2019. Any modification that affects the stated tests must be named by the manufacturer/supplier of the product to ensure that the product meets all requirements of the EN 50549-1:2019.