

Certificate of Conformity

No. ESY 114387 0146 Rev. 00

Holder of Certificate: **Huawei Digital Power Technologies Co., Ltd.**
Office 01, 39th Floor, Block A
Antuoshan Headquarters Towers
33 Antuoshan 6th Road, Futian District
518043 Shenzhen
PEOPLE'S REPUBLIC OF CHINA

Product: **Converter
(PV Inverter)**

Model(s): **SUN2000-3K-LB0, SUN2000-3.68K-LB0,
SUN2000-4K-LB0, SUN2000-4.6K-LB0,
SUN2000-5K-LB0, SUN2000-6K-LB0,
SUN5000-3K-LB0, SUN5000-6K-LB0**

Parameters: See pages 3-4

Applicable standards: EN 50549-1:2019/AC:2019
RfG:2016
NC RfG:2018
PTPIREE:2021

This Certificate of Conformity confirms the compliance with the above listed standards on a voluntary basis. It refers only to the sample submitted to TÜV SÜD Product Service GmbH and does not certify the quality or safety of the serial products. It was issued according to TÜV SÜD Product Service certification program Photovoltaics and Grid Integration. For details see: www.tuvsud.com/ps-cert

Test report no.: 64290243152701

Date, 2024-12-16



(Billy Qiu)

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Technical Certifier (Billy Qiu) appointed by Certification Body TÜV SÜD Product Service GmbH performed assessment of the products listed in this certification in the place: Ridlerstraße 65, 80339 Munich, Germany.

Test requirement	The certification complies with the requirements of the following documents and standards for Type A PGM installations: EN 50549-1:2019/AC:2019 Requirements for generating plants to be connected in parallel with distribution networks - Part 1: Connection to a LV distribution network -Generating plants up to and including Type B RfG:2016 Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for the connection of generating units to the Network (OJ EU L 112/1 of 27.4.2016) NC RfG:2018 General applicability requirements resulting from EU commission regulation 2016/631 of 14 April 2016 establishing a network code concerning the requirements for with regard to the connection of generating units to the grid (NC RfG-2018)- approved by the Decision of the President of the Energy Regulatory Office DRE.WOSE.7128.550.2.2018.ZJ dated 2 January 2019. PTPIREE:2021 Conditions and procedures for the use of certificates in the process of connecting modules generation modules to the power grid V1.2
Type of certification programme	1(a) according to EN ISO/IEC 17067 Based on Photovoltaics and Grid Integration Certification Program (Revision 6, Dated 5 Dec 2021) for Poland Grid Code
Manufacturer & Address of manufacturing site	Huawei Digital Power Technologies Co., Ltd. Office 01, 39th Floor, Block A, Antuoshan Headquarters Towers, 33 Antuoshan 6th Road, Futian District, 518043 Shenzhen, PEOPLE'S REPUBLIC OF CHINA
Software version	V300R024
Certificate expiry date	2029-12-15

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Parameters:

Model	SUN2000-3K-LB0	SUN2000-3.68K-LB0	SUN2000-4K-LB0
PV terminal parameters			
Maximum PV voltage [V _{DC}]	600		
Rated voltage [V _{DC}]	360		
MPPT voltage range [V _{DC}]	40 ÷ 560		
MPPT voltage range (full load) [V _{DC}]	120 ÷ 480	140 ÷ 480	155 ÷ 480
Maximum input current [A _{DC}]	16/16		
Isc PV [A _{DC}]	20/20		
MPPT tracker number	2		
Maximum input power [W]	4500	5520	6000
Grid terminal output parameters			
Rated output voltage [V _{AC}]	1P+N+PE, 230		
Rated output frequency [Hz]	50		
Rated output current [A _{AC}]	13.0	16.0	17.4
Maximum continuous output current [A _{AC}]	15.0	16.0	20.0
Rated output active power [W]	3000	3680	4000
Maximum output active power [W]	3300	3680	4400
Maximum output apparent power [VA]	3300	3680	4400
Power factor range	0.8 inductive ÷ 0.8 capacitive		

Model	SUN2000-4.6K-LB0	SUN2000-5K-LB0	SUN2000-6K-LB0
PV terminal parameters			
Maximum PV voltage [V _{DC}]	600		
Rated voltage [V _{DC}]	360		
MPPT voltage range [V _{DC}]	40 ÷ 560		
MPPT voltage range (full load) [V _{DC}]	180 ÷ 530	190 ÷ 530	230 ÷ 530
Maximum input current [A _{DC}]	16/16		
Isc PV [A _{DC}]	20/20		
MPPT tracker number	2		
Maximum input power [W]	6900	7500	9000
Grid terminal output parameters			
Rated output voltage [V _{AC}]	1P+N+PE, 230		
Rated output frequency [Hz]	50		
Rated output current [A _{AC}]	20.0	21.7	26.1
Maximum continuous output current [A _{AC}]	23.0	25.0	30.0
Rated output active power [W]	4600	5000	6000
Maximum output active power [W]	5000	5500	6600
Maximum output apparent power [VA]	5000	5500	6600
Power factor range	0.8 inductive ÷ 0.8 capacitive		

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Model	SUN5000-3K-LB0	SUN5000-6K-LB0
PV terminal parameters		
Maximum PV voltage [V_{DC}]	600	
Rated voltage [V_{DC}]	360	
MPPT voltage range [V_{DC}]	40 ÷ 560	
MPPT voltage range (full load) [V_{DC}]	120 ÷ 480	230 ÷ 530
Maximum input current [A_{DC}]	16/16	
Isc PV [A_{DC}]	20/20	
MPPT tracker number	2	
Maximum input power [W]	4500	9000
Grid terminal output parameters		
Rated output voltage [V_{AC}]	1P+N+PE, 230	
Rated output frequency [Hz]	50	
Rated output current [A_{AC}]	13.0	26.1
Maximum continuous output current [A_{AC}]	15.0	30.0
Rated output active power [W]	3000	6000
Maximum output active power [W]	3300	6600
Maximum output apparent power [VA]	3300	6600
Power factor range	0.8 inductive ÷ 0.8 capacitive	

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Scope of assessment and results

Requirement	Clause of RfG:2016	Clause of NC RfG: 2018	Type A	Type B	Type C	Type D	Evaluation result
Frequency range	Article 13.1 (a)	Article 13.1 (a) (i)	Y	N/A	N/A	N/A	Positive
Ability to withstand the rate of change of frequency (RoCoF) df/dt	Article 13.1 (b)	Article 13.1 (b)	Y	N/A	N/A	N/A	Positive
Power generating module operating mode in which the generated active power decreases in response to an increase in system frequency above a specified value (LFSSM-O)	Article 13.2(*)	Article 13.2 (a) (b) (f)	Y	N/A	N/A	N/A	Positive
Maximum power capability reduction with falling frequency	Article 13.4 & 13.5	Article 13.4	Y	N/A	N/A	N/A	Positive
Remote ceasing active power generation	Article 13.6	Article 13.6	Y	N/A	N/A	N/A	Positive
Automatic connection to the network	Article 13.7 & 14.4	Article 13.7 & 14.4 (a)	Y	N/A	N/A	N/A	Positive
Remark: * Article 13.2 lit. b) only applies to PGM type A according to the RfG:2016.							