NINGBO DEYE INVERTER TECHNOLOGY CO.,LTD
ADDRESS:NO.26 SOUTHERN YONGJIANG ROAD,BEILUN,NINGBO CHINA
Daiyd@deye.com.cn
TEL:0086-574-86228957
FAX:0086-574-86228957

EU Declaration of Conformity

Product: **Hybrid Inverter**

Model:SUN-5K-SG04LP3-EU;SUN-6K-SG04LP3-EU;SUN-8K-SG04LP3-EU;SUN-10K-SG04LP3-EU;SUN-12K-SG04LP3-EU

Name and address of the manufacturer: NingBo Deye Inverter Technology Co.,Ltd. NO.26 SOUTHERN YONGJIANG ROAD,BEILUN,NINGBO CHINA.

Name and address of authorized EU/EEA importer: NingBo Deye Inverter Technology Co.,Ltd. NO.26 SOUTHERN YONGJIANG ROAD,BEILUN,NINGBO CHINA.

This declaration of conformity is issued under the sole responsibility of the manufacturer. Also this product is under manufacturer's warranty.

CE

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation: The Low Voltage Directive (LVD) 2014/35/EU;the Electromagnetic Compatibility (EMC) Directive 2014/30/EU;the restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU.

References to the relevant harmonised standards used or references to the other technical specifications in relation to which conformity is declared:

LVD:	
EN 62109-1:2010	●
EN 62109-2:2011	●
EMC:	
EN IEC 61000-6-1:2019	●
EN IEC 61000-6-2:2019	●
EN 61000-6-3:2007+A1:2011+AC:2012	●
EN IEC 61000-6-4:2019	●
ROHS:	
EN IEC 63000:2018	●

Additional information: CE mark was affixed on the product since 2017.

宁波德业变频技术有限公司
NINGBO DEYE INVERTER TECHNOLOGY CO.,LTD.

David Ji

David Ji

Senior Standard and Certification Engineer

On behalf of NingBo Deye Inverter Technology Co.,Ltd.

December 3,2021

Place: NingBo, China

Certificate of compliance

Applicant:	**NingBo Deye Inverter Technology Co., Ltd.** No. 26 South YongJiang Road, Daqi, Beilun, NingBo, **China**
Product:	**Photovoltaic (PV) and battery inverter**
Model:	**SUN-5K-SG04LP3-EU** **SUN-6K-SG04LP3-EU** **SUN-8K-SG04LP3-EU** **SUN-10K-SG04LP3-EU** **SUN-12K-SG04LP3-EU**

Inverter for three-phase parallel connection to the public grid. The network monitoring and disconnection device is an integral part of the above-mentioned model.

Applied rules and standards:

EN 50549-1:2019
Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

4.4 Normal operating range
4.5 Immunity to disturbances
4.6 Active response to frequency deviation
4.7 Power response to voltage variations and voltage changes
4.8 EMC and power quality
4.9 Interface protection
4.10 Connection and starting to generate electrical power
4.11 Ceasing and reduction of active power on set point
4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

DIN V VDE V 0126-1-1:2006 (4.1 Functional safety)
Automatic disconnection device between a generator and the public low-voltage grid

Commission Regulation (EU) 2016/631 of 14 April 2016
Establishing a network code on requirements for grid connection of generators (NC RFG).
Type approval for generation units to use in Type A.

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number:	**ASUE-ESH-P22010034**	**Certification Program:**	**NSOP-0032-DEU-ZE-V01**
Certificate number:	**U22-0169**	**Date of issue:**	**2022-03-30**

Certification body

Thomas Lammel

DAkkS Deutsche Akkreditierungsstelle D-ZE-12024-01-00

Certification body Bureau Veritas Consumer Products Services Germany GmbH accreditation to DIN EN ISO/IEC 17065

Testing laboratory accredited according to DIN EN ISO/IEC 17025

A partial representation of the certificate requires the written approval of Bureau Veritas Consumer Products Services Germany GmbH

Annex to the EN 50549-1 certificate of compliance No. U22-0169

Appendix

Extract from test report according to EN 50549-1 **No. ASUE-ESH-P22010034**

Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016				
Manufacturer / applicant	NingBo Deye Inverter Technology Co., Ltd. No. 26 South YongJiang Road, Daqi, Beilun, NingBo, China			
Micro-generator Type	Photovoltaic and battery inverter			
	SUN-5K-SG04LP3-EU	SUN-6K-SG04LP3-EU	SUN-8K-SG04LP3-EU	SUN-10K-SG04LP3-EU
MPP DC voltage range [V]	200-650	200-650	200-650	200-650
Input DC voltage range [V]	160-800	160-800	160-800	160-800
Input DC current [A]	13+13	13+13	13+13	26+13
Output AC voltage [V]	3L/N/PE 400, 50Hz/60Hz	3L/N/PE 400, 50Hz/60Hz	3L/N/PE 400, 50Hz/60Hz	3L/N/PE 400, 50Hz/60Hz
Output AC current [A]	7,6	9,1	12,1	15,2
Output power [W]	5000	6000	8000	10000
Battery DC voltage range [V]	40-60	40-60	40-60	40-60
Battery charge current [A]	120	150	190	210
Battery discharge current [A]	120	150	190	210
	SUN-12K-SG04LP3-EU	--	--	--
MPP DC voltage range [V]	200-650	--	--	--
Input DC voltage range [V]	160-800	--	--	--
Input DC current [A]	26+13	--	--	--
Output AC voltage [V]	3L/N/PE 400, 50Hz/60Hz	--	--	--
Output AC current [A]	18,2	--	--	--
Output power [W]	12000	--	--	--
Battery DC voltage range [V]	40-60	--	--	--
Battery charge current [A]	240	--	--	--
Battery discharge current [A]	240	--	--	--
Firmware version	Beginning with V1090			

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 the inverter bridge and two series-connected relays in each line and neutral. This enables a safe disconnection of the power generation unit from the network in case of error.

Note:

The settings of the interface protection are password protected adjustable.

In case the above stated generators are used with an external protection device, the protection settings of the inverters are to be adjusted according to the manufacturer's declaration.

The above stated generators are tested according to the requirements in the EN 50549-1:2019 Commission Regulation (EU) 2016/631 of 14 April 2016. 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.

Dongguan BALUN Testing Technology Co., Ltd.
Room 104, 204, 205, Building 1, No. 6, Industrial South Road, Songshan Lake District, Dongguan, Guangdong, China

VERIFICATION OF CONFORMITY

Certificate No.:	BL-DG21C0658D01
Applicant:	NingBo Deye Inverter Technology Co., Ltd.
Address:	No.26 South YongJiang Road, Daqi, Beilun, NingBo, China.
Manufacture:	NingBo Deye Inverter Technology Co., Ltd.
Address:	No.26 South YongJiang Road, Daqi, Beilun, NingBo, China.
Product:	Hybrid inverter
Brand name:	Deye
Model name:	SUN-5K-SG04LP3-EU, SUN-6K-SG04LP3-EU, SUN-8K-SG04LP3-EU, SUN-10K-SG04LP3-EU, SUN-12K-SG04LP3-EU

The submitted sample of the above product has been tested according with below Standard(s) used for showing compliance with the essential requirements in the **LVD directive (2014/35/EU)** :

Applied Standards:	**Report No.:**
EN 62109-1:2010; EN 62109-2:2011	BL-DG21C0658-B01 BL-DG21C0658-B01 attachment 1

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Simon Qi

Date of Issue: Dec. 31, 2021

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VERIFICATION OF CONFORMITY

Dongguan BALUN Testing Technology Co., Ltd.
Room 104, 204, 205, Building 1, No. 6, Industrial South Road, Songshan Lake District, Dongguan, Guangdong, China

Certificate No.:	BL-DG2141023D04
Applicant:	NingBo Deye Inverter Technology Co., Ltd.
Address:	No.26 South YongJiang Road, Daqi, Beilun, NingBo, China.
Manufacture:	NingBo Deye Inverter Technology Co., Ltd.
Address:	No.26 South YongJiang Road, Daqi, Beilun, NingBo, China.
Product:	Hybrid inverter
Brand name:	Deye
Model name:	SUN-5K-SG04LP3-EU, SUN-6K-SG04LP3-EU, SUN-8K-SG04LP3-EU, SUN-10K-SG04LP3-EU, SUN-12K-SG04LP3-EU, SUN-5K-SG04LP3-AU, SUN-6K-SG04LP3-AU, SUN-8K-SG04LP3-AU, SUN-10K-SG04LP3-AU, SUN-12K-SG04LP3-AU

The submitted sample of the above product has been tested according with below Standard(s) used for showing compliance with the essential requirements in the **EMC directive (2014/30/EU)** :

Applied Standards:	**Report No.:**
EN IEC 61000-6-1:2019; EN IEC 61000-6-2:2019 EN 61000-6-3:2007+A1:2011+AC:2012; EN IEC 61000-6-4:2019; EN IEC 61000-3-2:2019; EN 61000-3-3:2013+A1:2019; EN IEC 61000-3-11:2019; EN 61000-3-12:2011	BL-DG2141023-404(G1)

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Date of Issue: Feb. 15, 2022

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