


**VERIFICATION OF COMPLIANCE**

**Applicant:** NingBo Deye Inverter Technology Co., Ltd.  
No. 26 South YongJing Road, Daqi, Beilun, NingBo, China

**Device Category:** Inverter

**Device Type:** Hybrid (PV with DC coupled Electricity Storage)

**Model(s):** **SUN-3K-SG03LP1-EU** | **SUN-3.6K-SG03LP1-EU**  
**SUN-5K-SG03LP1-EU** | **SUN-6K-SG03LP1-EU**

**Trademark:** 

**Technical data:** Product family: SUN-3~6K-SG03LP1-EU  
(For further details see A.2 Technical data of the Generating Unit(s) on p.2)

**Software version:** Ver0108

**Grid connection code:** **CEI 0-21: 2022**  
Technical reference rule for the connection of active and passive users to the LV electricity distribution networks of companies.  
**Topology of the device, which this certificate is based on:**

INTERFACE DEVICE	PROTECTION INTERFACE	STATIC ELECTRONIC INVERTER	ROTATING GENERATION MACHINE
X	X	X	

Indicate with one x the field or fields to which the declaration refers.  
**PHASE NUMBER: single-phase**

Note:  
The device is able to limit the I<sub>dc</sub> to 0.5% of the nominal current.  
The device is for plants of each power.  
The inverters of NingBo Deye Inverter Technology Co., Ltd. have a maximum apparent power limit. In the case where a system should be able to reach in every working condition a determined power factor, it is necessary to set the maximum active power in such a way, that you can reach at any time the cos-phi wanted.

**Test report no.:** **221103BWA128-EG-IT-003** (2023-04-06)

This verification confirms that the above-mentioned generating unit(s) with corresponding software meet the requirements of the referenced grid connection code at the time the tests were conducted.



*Jack Shi*  
**Jack Shi**  
Sr. Project Manager

Annex to the Verification No.: **221103BWA128-EG-IT-C003**

**A.1 Revision history of the verification**

Revision	Date	Changes	Status
0 (221103BWA128-EG-IT-C003)	2023-04-06	Initial issue	Active

**A.2 Technical data of the Generating Unit(s)**

Model	SUN-3K-SG03LP1-EU	SUN-3.6K-SG03LP1-EU
DC input (PV)		
Max. DC input voltage [V]	500	
Operating MPPT voltage range [V]	150 ~ 450	
Input DC current [A]	max. 13	max. 13 / 13
Battery connection		
Battery voltage range [V]	48 (40-60)	
Battery charging and discharging current [A]	max. 70	max. 90
Battery charging and discharging power [kW]	3,3	3,96
AC connection		
Nominal output AC voltage [V]	230/400 (L + N + PE, 50 Hz)	
Output AC current [A]	max. 14,3	max. 17,2
Nominal active output power P <sub>n</sub> [kW]	3,0	3,6
Max. apparent power [kVA]	3,3	3,96

Model	SUN-5K-SG03LP1-EU	SUN-6K-SG03LP1-EU
DC input (PV)		
Max. DC input voltage [V]	500	
Operating MPPT voltage range [V]	150 ~ 450	
Input DC current [A]	max. 13 / 13	
Battery connection		
Battery voltage range [V]	48 (40-60)	
Battery charging and discharging current [A]	max. 120	max. 135
Battery charging and discharging power [kW]	23,9	28,7
AC connection		
Nominal output AC voltage [V]	230/400 (L + N + PE, 50 Hz)	
Output AC current [A]	max. 21,7	max. 26,1
Nominal active output power P <sub>n</sub> [kW]	5,0	6,0
Max. apparent power [kVA]	5,5	6,6

Software version	Ver0108
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Factory's name	<b>NingBo Deye Inverter Technology Co., Ltd.</b>
Factory address	No. 26 South YongJing Road, Daqi, Beilun, NingBo, China

Testing laboratory	<b>Guangdong HuaChuang Technology Service Co., Ltd.</b> Room 815, No.122, Houjie Road (West), Houjie Town, Dongguan City, Guangdong, 523960, P.R. China (Accredited acc. ISO/IEC 17025: A2LA Accreditation no. 5200.02)
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Testing location	Same as above
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Date(s) of performance of tests	2022-11-07 to 2023-03-30
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**A.3 Batteries that can be used with the static converters listed above**

Brand	V-TAC EXPORTS LIMITED
Technology	Secondary (Rechargeable) Lithium Battery
Model	VT48200B
CUS module [kWh]	7,68
Firmware version BMS	Ver:9.3
No. modules	1 ~ 15
Note	The batteries are not integrated in the converter and must be installed according to local regulations.