


Certificate No.: LS260084GCC-0

Date of issue: 2026-04-22

Valid until: Indefinitely

<b>Applicant:</b>	<b>NingBo Deye Inverter Technology Co.,Ltd.</b> No.26 South Yongjiang Road, Daqi, Beilun, Ningbo, China
<b>Product:</b>	Hybrid inverter with integrated AFPE function
<b>Model(s):</b>	<b>SUN-12K-SG01LP1-EU-AM3-P, SUN-14K-SG01LP1-EU-AM3-P, SUN-16K-SG01LP1-EU-AM3-P, SUN-18K-SG01LP1-EU-AM3-P</b>
<b>Trademark:</b>	
<b>Technical data:</b>	Nominal active output power [kW]: 12.0 ~ 18.0 Nominal output AC voltage [V]: 220 / 230 (L + N + PE, 50 / 60 Hz) (For further details see A.2 on p.2)
<b>Software version:</b>	Inv 0-9028-1727
<b>Applied standard(s) / guideline(s):</b>	<b>IEC 63027:2023</b> Photovoltaic power systems - DC arc detection and interruption
<b>Certification scheme:</b>	<b>CMPD-01</b> (Type 1a Certification in accordance with ISO/IEC 17067)
<b>Test report no.:</b>	<b>LS2A26012201EGIE01 (2026-04-14)</b>

This certificate confirms that the integrated AFPE function of the inverter models listed above was evaluated and found to comply, within the scope defined herein, with the applicable requirements of IEC 63027:2023 at the time of issuance.

The scope of this certificate is limited to the inverter-integrated AFPE function for string-inverter application in accordance with Annex B.2 of IEC 63027:2023. The certified scope covers the applicable classification, ratings, product information, construction and performance requirements, series arc fault tests, self-test function, and manual reconnection function, as documented in the relevant test report.

This certificate does not cover micro-inverter application, module-level DC/DC conversion application, or external combined-string application.

This certificate is issued as a **Type 1a Certification in accordance with ISO/IEC 17067**. It is based solely on type testing of the identified sample product(s) and the specific tests undertaken. It does not extend to production or ongoing manufacturing.

No certification mark is authorized for this certification scheme. No factory surveillance or follow-up is performed. This certificate becomes void if any modification is made to the certified product, its installation, erection, or commissioning that may affect compliance with the evaluated requirements.

This certificate does not imply LYNS's endorsement, approval, certification, or ongoing control of the product(s), either in terms of performance, design, manufacture, or materials used. The certificate and the results stated herein relate solely to the sample product(s) tested and to the specific tests undertaken.

The certificate will remain valid for the stated period provided that no changes are made to the product, production method, or relevant certification scheme. This certificate is only valid when it is also found at <http://www.lyns-tci.com/en/certificate-search> or by contacting Lyns-tci Technology Guangdong Co., Ltd..

This certificate is for the exclusive use of LYNS's Client and is provided pursuant to the agreement between LYNS and its Client. LYNS's responsibility and liability are limited to the terms and conditions of the agreement. LYNS assumes no liability to any party other than the Client, in accordance with the agreement, for any loss, expense, or damage occasioned by the use of this certification.

The certificate is comprised of 3 pages (including Annex of 2 pages).

Dongguan, 2026-04-22

**Dipl.-Ing. Weizhao Zheng**  
**Head of certification body**

Certification body Lyns-tci Technology Guangdong Co., Ltd. accredited according to ISO/IEC 17065 for product certification.

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### A.1 Revision history of the certificate

Rev. No.	Date	Changes	Status
0	2026-04-22	Initial issue	Active

### A.2 Technical data of the power generating unit(s)

Model	SUN-12K-SG01LP1-EU-AM3-P	SUN-14K-SG01LP1-EU-AM3-P
Input PV (DC)		
Max. DC input voltage [V]	500	
Operating MPPT voltage range [V]	150 - 425	
Max. input DC current [A]	36 / 36 / 36	
Max. Short Circuit current [A]	54 / 54 / 54	
No. of MPP Trackers	3	
No. of strings per MPP Tracker	2	
Input Battery		
Battery voltage range (V)	40 - 60	
Max. charging / discharge current (A)	220	250
Battery type	Lead-acid or Lithium-ion	
Output (AC)		
Rated output AC voltage [V]	220 / 230 (L + N + PE, 50 / 60 Hz)	
Max. Output AC current [A]	60.0 / 57.4	70.0 / 67.0
Rated active power [kW]	12.0	14.0
Max. apparent power [kVA]	13.2	15.4
Model	SUN-16K-SG01LP1-EU-AM3-P	SUN-18K-SG01LP1-EU-AM3-P
Input PV (DC)		
Max. DC input voltage [V]	500	
Operating MPPT voltage range [V]	150 - 425	
Max. input DC current [A]	36 / 36 / 36	
Max. Short Circuit current [A]	54 / 54 / 54	
No. of MPP Trackers	3	
No. of strings per MPP Tracker	2	
Input Battery		
Battery voltage range (V)	40 - 60	
Max. charging / discharge current (A)	290	380
Battery type	Lead-acid or Lithium-ion	
Output (AC)		
Rated output AC voltage [V]	220 / 230 (L + N + PE, 50 / 60 Hz)	
Max. Output AC current [A]	80.0 / 76.6	90.0 / 86.1
Rated active power [kW]	16.0	18.0
Max. apparent power [kVA]	17.6	19.8
Operating temperature range	-40°C - 60°C	
Degree of protection	IP65	
Protection class	I	

Annex to the Certificate No.: **LS260084GCC-0**

Overvoltage category	AC: III; DC: II
Topology	No galvanic isolation
AFPE / AFCI classification	F-I-AFPE-2-3-1
Software version	Inv 0-9028-1727
Manufacturing factory	<b>NingBo Deye Inverter Technology Co.,Ltd.</b> No.26 South YongJiang Road, Daqi, Beilun, Ningbo, China

**A.3 Remarks for type testing**

Testing laboratory	<b>Lyns-tci Technology Guangdong Co., Ltd.</b> Room 1201, Unit 2, Building 18, No. 7, Science and Technology Boulevard, Houjie Town, Dongguan City, Guangdong, 523960 P.R.C (Accredited acc. ISO/IEC 17025: A2LA Accreditation no. 5200.02)
Testing location	Same as above
Measurement period	2026-01-22 - 2026-03-18