LYNS-TCi

CERTIFICATE OF CONFORMITY

Certificate No.: LS260092GCC-0
Date of issue: 2026-04-29
Valid until: Indefinitely

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

Product: Hybrid inverter with integrated AFPE function

Model(s):

AI-W5.1-3.6P1-EU-B,	AI-W5.1-5P1-EU-B,	AI-W5.1-6P1-EU-B,	AI-W5.1-7P1-EU-B,
AI-W5.1-7.6P1-EU-B,	AI-W5.1-8P1-EU-B,	AI-W5.1-10P1-EU-B;	
SUN-3.6K-SG05LP1-EU-AM2-P,	SUN-5K-SG05LP1-EU-AM2-P,	SUN-6K-SG05LP1-EU-AM2-P,	SUN-7K-SG05LP1-EU-AM2-P,
SUN-7.6K-SG05LP1-EU-AM2-P,	SUN-8K-SG05LP1-EU-AM2-P,	SUN-10K-SG05LP1-EU-AM2-P;	
SUN-3.6K-SG05LP1-EU-SM2-P,	SUN-5K-SG05LP1-EU-SM2-P,	SUN-6K-SG05LP1-EU-SM2-P,	SUN-7K-SG05LP1-EU-SM2-P,
SUN-7.6K-SG05LP1-EU-SM2-P,	SUN-8K-SG05LP1-EU-SM2-P,	SUN-10K-SG05LP1-EU-SM2-P	

Trademark: Deye

Technical data:

Nominal active output power [W]:	3600 - 10000
Nominal output AC voltage [V]:	220 / 230 (L + N + PE, 50 / 60 Hz)

(For further details see *A.2* on p.2)

Software version: Ver 0-5387-1515

Applied standard(s) / guideline(s): **IEC 63027:2023**
Photovoltaic power systems - DC arc detection and interruption

Certification scheme: **CMPD-01**
(Type 1a Certification in accordance with ISO/IEC 17067)

Test report no.: **LS2A26012201EGIE02** (2026-04-20)

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 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 requirements, as documented in the relevant test report.

No conformity is implied for micro-inverter application, module-level DC/DC conversion application, or external combined-string application.

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

Dongguan, 2026-04-29

Digitally signed by Weizhao Zheng
Date: 2026.04.29 21:38:14 +08'00'

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.

Lyns-tci Technology Guangdong Co., Ltd.
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Release No.: 1.2 (2025)

Annex to the Certificate No.: **LS260092GCC-0**

A.1 Revision history of the certificate

Rev. No.	Date	Changes	Status
0	2026-04-29	Initial issue	Active

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

Model		**AI-W5.1-3.6P1-EU-B** **SUN-3.6K-SG05LP1-EU-AM2-P** **SUN-3.6K-SG05LP1-EU-SM2-P**	**AI-W5.1-5P1-EU-B** **SUN-5K-SG05LP1-EU-AM2-P** **SUN-5K-SG05LP1-EU-SM2-P**	**AI-W5.1-6P1-EU-B** **SUN-6K-SG05LP1-EU-AM2-P** **SUN-6K-SG05LP1-EU-SM2-P**
Input PV (DC)				
Max. DC input voltage [V]		500		
Operating MPPT voltage range [V]		150 - 425		
Max. input DC current [A]		18 / 18		
Max. Short Circuit current [A]		27 / 27		
No. of MPP Trackers		2		
No. of strings per MPP Tracker		1		
Input Battery				
Battery voltage range (V)		40 - 60		
Max. charging / discharge current (A)		90	120	135
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]	“-B” model	18.0 / 17.2	25.0 / 23.9	30.0 / 28.7
	“-AM2-P” model	18.0 / 17.2	25.0 / 23.9	30.0 / 28.7
	“-SM2-P” model	18.0 / 17.3	25.0 / 24.0	30.0 / 28.7
Rated active power [W]		3600	5000	6000
Max. apparent power [VA]		3960	5500	6600
AFPE / AFCI classification		F-I-AFPE-1-2-1		

Model	**AI-W5.1-7P1-EU-B** **SUN-7K-SG05LP1-EU-AM2-P** **SUN-7K-SG05LP1-EU-SM2-P**	**AI-W5.1-7.6P1-EU-B** **SUN-7.6K-SG05LP1-EU-AM2-P** **SUN-7.6K-SG05LP1-EU-SM2-P**	**AI-W5.1-8P1-EU-B** **SUN-8K-SG05LP1-EU-AM2-P** **SUN-8K-SG05LP1-EU-SM2-P**	**AI-W5.1-10P1-EU-B** **SUN-10K-SG05LP1-EU-AM2-P** **SUN-10K-SG05LP1-EU-SM2-P**
Input PV (DC)				
Max. DC input voltage [V]	500			
Operating MPPT voltage range [V]	150 - 425			
Max. input DC current [A]	32 / 32			
Max. Short Circuit current [A]	48 /48			
No. of MPP Trackers	2			
No. of strings per MPP Tracker	2			
Input Battery				
Battery voltage range (V)	40 - 60			
Max. charging / discharge current (A)	175	190		210
Battery type	Lead-acid or Lithium-ion			
Output (AC)				

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Rated output AC voltage [V]		220 / 230 (L + N + PE, 50 / 60 Hz)			
Max. Output AC current [A]	"-B" model	35.0 / 33.5	38.0 / 36.3	40.0 / 38.3	50.0 / 47.9
	"-AM2-P" model	35.0 / 33.5	38.0 / 36.3	40.0 / 38.3	50.0 / 47.9
	"-SM2-P" model	35.0 / 33.5	38.0 / 36.4	40.0 / 38.3	50.0 / 47.9
Rated active power [W]		7000	7600	8000	10000
Max. apparent power [VA]		7700	8360	8800	11000

AFPE / AFCI classification	F-I-AFPE-2-2-1

Operating temperature range	-40°C - 60°C
Degree of protection	IP65
Protection class	I
Overvoltage category	AC: III; DC: II
Topology	No galvanic isolation

Software version	Ver 0-5387-1515

Manufacturing factory	**NingBo Deye Inverter Technology Co.,Ltd.** No.26 South YongJiang Road, Daqi, Beilun, Ningbo, China

A.3 Remarks for type testing

Testing laboratory	**Lyns-tci Technology Guangdong Co., Ltd.** 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 - 2026-03-28