



# C E R T I F I C A T E

**Certificate registration number:** G3.2603.775.2.C7

**Certificate holder:** Shenzhen Kaifa Technology (Chengdu) Co., Ltd.

**Product designation:** AJ102C

Hardware version V1.1, Firmware version V02020211

**Certification date:** March 3<sup>rd</sup> 2026

This certificate indicates the above-mentioned product successfully completed certification testing with regards to the G3-Alliance reference specification ITU G.9903 (08-2017) including Amendment 1 (05/21), Amendment 2 (03/23) and Corrigendum 1 (03/23), as published on <https://www.itu.int/rec/T-REC-G.9903>.

The certificate applies to certification profile FCC Multipurpose Worldwide and the device was configured as a PAN-Coordinator. The optional features of the G3 protocol coherent mode and support of 12 SYNCP symbols are also covered by this certification.

Test cases have been performed as described in the test report referred to below. This certificate is granted on account of tests conducted by TÜV Rheinland in Yokohama, Japan in February 2026. The results and remarks can be found in the complete test report.

Applied tests	Performed by	Document evidence
Conformance, interoperability and performance testing according to the test specification referenced by the test report	TÜV Rheinland Japan	JP26NLKH 002

The device tested is a G3-PLC FCC 3-phase Data Concentrator. The product is equipped with the G3-Alliance certified platform AJ102C with certificate no. G3.2603.774.1.C7. The Protocol Implementation Conformance Statement in the Annex includes the PICS related to performance and is an integral part of this certificate. This certificate is valid from March 3<sup>rd</sup> 2026.

The certificate is only applicable to the product described above and permits the use of the G3-PLC logo as laid down in the G3-Alliance logo license agreement.

This certificate does not imply assessment of the production. This certificate shall not be defined, or used as a guarantee covering quality of a product which includes G3-PLC. The liability of the Alliance and the test laboratory or any of her representatives is excluded for any damages or losses of the certified company.

Paris, March 3<sup>rd</sup> 2026

For the G3-Alliance:

  
**Marc Delandre**  
Chairman

  
**Madeleine Francillard**  
Chair Certification Program





# Annex 1: Protocol Implementation Conformance Statement (PICS)

## Feature implementation statement

Name	Value	Description
BAND_PLAN	FCC	Indicates the band-plan supported by the device
BAND_PLAN_RF	N/A	Indicates the RF band plan(s) supported by the device
FEATURE_PAN_COORDINATOR	TRUE	Indicates whether the device is a PAN-Coordinator (true) or a normal device (false)
FEATURE_COHERENT_MODULATION	TRUE	Indicates whether coherent modulation is supported
FEATURE_EAP_SERVER	TRUE	Indicates whether an EAP-PASK server is implemented by the DUT Applies only if FEATURE_PAN_COORDINATOR = true
FEATURE_D8PSK_MODULATION	TRUE	Indicates whether D8PSK modulation is supported
FEATURE_ROUTING	TRUE	Indicates whether routing is implemented by the IUT
FEATURE_SECURITY	F1	Indicates the security implemented by the device. Possible values are: F1, F2
FEATURE_ACTIVE_SCAN	TRUE	Indicates whether the active scan process is done by the IUT after power-up
FEATURE_PREAMBLE_COEXISTENCE_MECHANISM	FALSE	Indicates whether the preamble-based coexistence mechanism is used by the IUT
FEATURE_HYBRID_RF	FALSE	Indicates whether Hybrid PLC+RF feature is supported
FEATURE_FREQUENCY_HOPPING	FALSE	Indicates whether the Frequency Hopping mechanism is supported
FEATURE_PREAMBLE_12_SY_NCP	TRUE	Indicates whether the device supports the transmission and reception of frames with preamble of 12 SYNCP symbols

*[Handwritten signatures]*



# Annex 2: Protocol Implementation Conformance Statement (PICS)

## PICS related to performance (1/2)

The device tested is a G3-PLC FCC 3-phase Data Concentrator, communicating on 3 phases. Testing was performed on phase 1.

Operating voltage applied for certification testing was 3NAC400V (3x230V L-N) / 50Hz.

Name	Value	Unit	Description
<p>PICS related to performance are available through manufacturer only.</p>			

*Handwritten initials/signature*



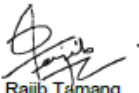


# Annex 2: Protocol Implementation Conformance Statement (PICS)

PICS related to performance (2/2)

Name	Value	Unit	Description
<p>PICS related to performance are available through manufacturer only.</p>			

## Annex 3: Copy of test report cover sheet

<b>Test Report – Products</b> <i>Prüfbericht - Produkte</i>			
<b>Test report no.:</b> <i>Prüfbericht-Nr.:</i>	JP26NLKH 002	<b>Order No.:</b> <i>Auftragsnr.:</i>	150320421 40 <span style="float: right;">Page 1 of 59 Seite 1 von 59</span>
<b>Client reference no.:</b> <i>Kunden-Referenz-Nr.:</i>	AJ102C	<b>Order date:</b> <i>Auftragsdatum:</i>	2025-12-25
<b>Client:</b> <i>Auftraggeber:</i>	Shenzhen Kaifa Technology (Chengdu) Co., Ltd. No. 99, Tianquan Rd, Hi-Tech Development Zone, 611731 Chengdu, P.R. China		
<b>Test item:</b> <i>Prüfgegenstand:</i>	Data Concentrator Unit (Product)		
<b>Identification / Type no.:</b> <i>Bezeichnung / Typ-Nr.:</i>	AJ102C		
<b>Order content:</b> <i>Auftrags-Inhalt:</i>	G3 Certification Test		
<b>Test specification</b> <i>Prüfgrundlage:</i>	Certification Test Procedures for G3-Alliance Certification - v7.2 G3 Conformance Tests Suite Specification - v0.39 G3 PLC 1-to-1 Interoperability Tests Suite Specification - v0.15 Performance test suite for G3 device certification - v0.28		
<b>Date of sample receipt:</b> <i>Wareneingangsdatum:</i>	2025-12-19		
<b>Test sample no.:</b> <i>Prüfmuster-Nr.:</i>	A004180943-005		
<b>Testing period:</b> <i>Prüfzeitraum:</i>	2026-02-02 - 2026-02-04		
<b>Place of testing:</b> <i>Ort der Prüfung:</i>	4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan		
<b>Testing laboratory:</b> <i>Prüflaboratorium:</i>	TÜV Rheinland Japan Ltd.		
<b>Test result*:</b> <i>Prüfergebnis*:</i>	Pass		
<b>tested by:</b> <i>geprüft von:</i>			
<b>Date:</b> 2026-02-13 <i>Datum:</i>	Rajib Tamang	<b>Issue date:</b> 2026-02-27 <i>Ausstellungsdatum:</i>	Martin Ziet
<b>Position / Stellung:</b>	Tester	<b>Position / Stellung:</b>	Authorizer
<b>Other:</b> <i>Sonstiges:</i>			
<b>Condition of the test item at delivery:</b> <i>Zustand des Prüfgegenstandes bei Anlieferung:</i>	Test item complete and undamaged Prüfmuster vollständig und unbeschädigt		
<b>* Legend:</b> P(pass) = passed a.m. test specification(s) F(all) = failed a.m. test specification(s) N/A = not applicable NT = not tested			
<b>* Legende:</b> P(asse) = entspricht o.g. Prüfgrundlage(n) F(all) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar NT = nicht getestet			
<b>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</b> <i>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</i>			
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