



C E R T I F I C A T E

Certificate registration number: G3.1906.298.2.C3

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

Product designation: AJ102C,
Hardware version V2.0, Firmware version V0003

Certification date: June 14th, 2019

This certificate indicates the above mentioned product successfully completed certification testing with regards to the reference specification ITU G.9903 (08-2017). The optional feature coherent mode of the G3-PLC protocol is also covered by this certification.

The certificate applies to certification profile FCC Multipurpose Worldwide and the device was configured as a PAN-Coordinator.

Test cases have been performed as described in the test report referred to below. This certificate is granted on account of tests conducted by Laboratoire des Applications Numériques (LAN) in Tauxigny, France in May 2019. The results and remarks can be found in the complete test report.

Table with 3 columns: Applied tests, Performed by, Document evidence. Row 1: Conformance, interoperability and performance testing according to the test specification referenced by the test report; Laboratoire des Applications Numériques (LAN); LAN19AF010

The device tested is a G3-PLC FCC 3-phase data concentrator. The data concentrator is equipped with the G3-PLC certified platform ST8500 with certificate no. G3.1803.194.1.C3. Modifications of the platform have been done by the platform manufacturer. 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 June 14th, 2019.

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-PLC 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, June 14th, 2019

For the G3-PLC Alliance:

Marc Desandre
Chairman

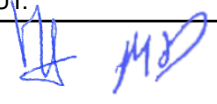
Madeleine Francillard
Chair Certification Program



Annex 1: Protocol Implementation Conformance Statement (PICS)

Feature implementation statement

| Name | Value | Description |
|--|-------|--|
| BAND_PLAN | FCC | Indicate the band-plan supported by the device. |
| FEATURE_PAN_COORDINATOR | TRUE | Indicate if the device is a PAN-Coordinator (true) or a normal device (false). |
| FEATURE_COHERENT_MODULATION | TRUE | Indicate if coherent modulation is supported. |
| FEATURE_EAP_SERVER | TRUE | Indicate if an EAP-PASK server is implemented by the DUT. Apply only if FEATURE_PAN_COORDINATOR = true. |
| FEATURE_D8PSK_MODULATION | TRUE | True / False |
| FEATURE_ROUTING | TRUE | Indicate if the routing is implemented by the IUT. |
| FEATURE_SECURITY | F1 | Indicate the security implemented by the device. Possible values are: F1, F2. |
| FEATURE_ACTIVE_SCAN | TRUE | Indicate if the active scan process is done by the IUT after power-up. |
| FEATURE_PREAMBLE_COEXISTENCE_MECHANISM | FALSE | Indicate if the preamble-based coexistence mechanism is used by the IUT. |





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 3 X 230V / 50Hz.

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



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 vendor only.</p> | | | |

Annex 3: Copy of test report cover sheet



| G3-PLC Certification Test Report | | | |
|---|-------|--------------------------|-----------|
| Shenzhen Kaifa Technology (Chengdu) Co., Ltd. | | AJ102C HW:V2.0 FW: V0003 | |
| LAN19AF010 | Ed.00 | June 6, 2019 | Page 1/44 |

G3-PLC Alliance
G3-PLC Product Certification Test Report

Vendor Name: Shenzhen Kaifa Technology (Chengdu) Co., Ltd.
 Model Name: AJ102C
 Serial N°: 139190300001
 HW version: V2.0
 FW version: V0003

Test Report #: TR_LAN19AF010 Ed.00
 Date: June 6, 2019

| | | |
|--------------------------|-----------------------|-------------------|
| CONF Tests Specification | version 0.25. | 13/09/2017 |
| CONF Tests Suite | version 2.6. | 10/2017 |
| IOT Tests Specification | version 0.10. | 08/09/2017 |
| IOT Tests Suite | version 2.3. | 09/2017 |
| PERF Tests Specification | version 0.25. | 28/09/2018 |
| PERF Tests Suite | version 2.6p1. | 02/2018 |

Test Tool: **version 1.8**
 Tester Modem: **version 1.10**
 Certification Test Procedures: **version 1.13** **06/03/2019**

Certification Profile: **C (FCC)**
 Role: **Data Concentrator**
 Overall Verdict: **PASS**



| Initiation | Date | Description of modification | Ed. |
|------------|--------------|-----------------------------|-----|
| Omar DIOUF | June 6, 2019 | Creation | 00 |

| | Realised by | Checked by | Approved by |
|-------------|--------------|-----------------|-----------------|
| Name | Omar DIOUF | Vincent BUCHOUX | Thierry DOLIGEZ |
| Date | June 6, 2019 | June 6, 2019 | June 6, 2019 |
| Sign | | | |

Handwritten initials/signatures in blue ink.

The current report and the test results produced in this current are given for information only and must not be relied on by any third person for any reason.
 This report contains an assessment of the apparatus carried out on samples submitted to the laboratory. The results in this report relate only to the items tested and were obtained in the period between the initial receipt of samples and the issue of the report. It should be noted that technical hardware or software modifications on the apparatus may impact the results reported in this document.