

#### CERTIFICATE

Certificate registration number: G3.1911.344.2.C3

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

**Product designation:** MA309MH4LAT2, Hardware version V2.3. Firmware version V096011

Certification date: November 1st, 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-Device.

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 October 2019. The results and remarks can be found in the complete test report.

Applied tests	Performed by	Document evidence
Performance testing according to the test specification referenced by the test report	Laboratoire des Applications Numériques (LAN)	LAN18AF059

The device tested is a G3-PLC FCC 3-phase meter. The meter is equipped with the G3-PLC certified platform ST8500 with certificate no. G3.1806.215.1.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 November 1<sup>st</sup>, 2019.

Only performance testing was done for this meter because the G3-PLC module was identical to the G3-PLC module in the certified 3-phase meter MA309MH4LAT1 with reference G3.1905.284.2.C3. This 3-phase meter was successfully tested for conformance and 1-to-1 Interoperability as well as for performance.

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, November 1st, 2019

For the G3-PLC Alliance:

Marc Delandre Chairman G3-PLC Alliance

Madeleine Francillard
Chair Certification Program

Authenticity of this certificate can be verified at <a href="http://www.g3-plc.com/certified-products-platforms/">http://www.g3-plc.com/certified-products-platforms/</a>

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## **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	FALSE	Indicate if the device is a PAN-Coordinator (true) or a normal device (false).
FEATURE_COHERENT_MODULAT ION	TRUE	Indicate if coherent modulation is supported.
FEATURE_EAP_SERVER	FALSE	Indicate if an EAP-PASK server is implemented by the DUT.
	FALSE	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_COEXISTE NCE_MECHANISM	FALSE	Indicate if the preamble-based coexistence mechanism is used by the IUŢ.
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## **Annex 2: Protocol Implementation Conformance Statement (PICS)**

#### PICS related to performance (1/2)

The device tested is a G3-PLC FCC 3-phase meter communicating on 1 phase. Testing was performed on phase 1.

Operating voltage applied for certification testing was 3 x 230V/50Hz.

name	value	Unit	Description	
PICS	relat a thro	ed to re av	o performance vailable vendor only.	

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# **Annex 2: Protocol Implementation Conformance Statement (PICS)**

PICS related to performance (2/2)

Name	Value	Unit	Description
PICS	relat	ed t	o performance
	a	re a'	vailable
	thro	ugh	vendor only.

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### Annex 3: Copy of test report cover sheet



**G3-PLC Certification Test Report** 

KAIFA

MA309MH4LAT2 HW:V2.3 FW: V096011

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### G3-PLC Alliance

### **G3-PLC Product Certification Test Report**

**KAIFA** Vendor Name

MA309MH4LAT2 Model Name

1KFM0300000027 Serial N°

HW version V2.3 V096011 FW version

TR LAN18AF059 Ed.00 Test Report # October 30, 2019

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

version 1.8 Test Tool Tester Modem version 1.10

21/08/2019 Certification Test Procedures version 1.14

Certification Profile C (FCC) Role Meter **PASS** Overall Verdict



#### Only PERF tests are executed in this Meter with same Module used for the already certified MA309MH4LAT1 FCC

Initiation	Date	Description of modification	Ed.
Omar DIOUF	October 30, 2019	Creation	00
	Realised by	Checked by	Approved by
Name	Omar DIOUF	Vincent BUCHOUX	Thierry DOLIGEZ
Date	October 30, 2019	October 30, 2019	October 30, 2019
Sign	SW/	V. E. X	
	<u></u>		Ma M.

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