

CERTIFICATE

Certificate registration number: G3.1602.074.1.A2

Certificate holder: ATMEL Spain S.A.U.

Platform designation: ATPL250A,

Hardware version Mother Board: ATPL250ABN v2, Daughter Board: ATPLCOUP007 v1,

Firmware version G3_v1.2.2

Certification date: February 18th, 2016

This certificate indicates the above mentioned platform successfully completed certification testing with regards to the reference specification ITU G.9903 (02-2014) plus the changes listed in an annex to this certificate. The optional feature coherent mode of the G3-PLC protocol is also covered by this certification.

The certificate applies to certification profile Metering Cenelec A 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 February 2016. The results and remarks can be found in the complete test report.

Applied tests	Performed by	Document evidence
Conformance and interoperability testing according to the test specification referenced by the test report	Laboratoire des Applications Numériques (LAN)	Test report LAN16AF006

The device tested is a G3-PLC platform: a solution providing an implementation of the G3-PLC specification. This certificate is valid from February 18th, 2016.

The certificate is only applicable to the platform described above and permits the use of the G3-PLC™ logo as laid down in the G3-PLC logo license agreement. The certificate may only be reproduced in full.

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, February 18th, 2016

For the G3-PLC Alliance:

Bernard Lassus

Chairman

Madeleine Francillard

Madeleine Francillard Chair Certification Program

G3-PLC Alliance

G3-PLC Alliance http://www.g3-plc.com Contact: Marc Delandre, General Secretary.

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Annex 1: Reference Version for Certification

The reference version for this certificate is published in 'Narrowband OFDM PLC specifications for G3-PLC network, April 2015'.

The reference version for this certification is:

ITU-T G.9903 (02-2014)

- + CCTT #24-25-30: Implementation of MAC security (anti-replay) solution F1
- + CCTT #61: ADPM-Buffer behavior clarification
- + CCTT #143: AC Phase Detection v2
- + CCTT #144: Hop Limit usage during route repair v3
- + CCTT #145: Value of RCCoord when the node is at adpMaxHops hops from the coordinator
- + CCTT #146: Pilot tone generation
- + CCTT #147: Link-cost computation for Path discovery v2
- + CCTT #148: Path discovery frame routing v3
- + CCTT #152: Scrambler reset
- + CCTT #154: Clarification of PANCount and PANDescriptor
- + CCTT #156: Clarification of ADPM-NETWORK-STATUS.indication
- + CCTT #157: Interleaver Equation v2
- + CCTT #158: Unicast Routing Process
- + CCTT #159: Correct the windowing function description
- + CCTT #160: Clarify 16QAM quantisation and optionality
- + CCTT #161: Correct aMaxFrameSize and aMinFrameSize for FCC/ARIB bandplans
- + CCTT #162: Interleaver co-prime number clarification v2
- + CCTT #163: CRC5 and CRC8 packing order
- + CCTT #164: Route Repair v2
- + CCTT #165: Clarification Neighbour Table v2
- + CCTT #167: HOP COUNT metric identifier v2
- + CCTT #169: Clarification on PLME_GET v4
- + CCTT #170: Clarification to Frame Counter Handling Mechanism v2
- + CCTT #172: Windowing in coherent mode
- + CCTT #173: Clarification of LOADng mechanism used to detect bidirectional links
- + CCTT #174: Avoiding duplicated MAC packets
- + CCTT #175: LOADng subsequent RREP generation
- + CCTT #176: Link cost function of LQI v3
- + CCTT #177: Broadcast routing filtering frames on the source
- + CCTT #178: Coexistence of G3-PLC with other PLC technologies v3
- + CCTT #179: RREP Filtering v3
- + CCTT #181: Route Repair v2



Annex 2: Protocol Implementation Conformance Statement (PICS)

Feature implementation statement

Name	Value	Description	
BAND_PLAN	CENELEC A	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_MODULAT	TRUE	Indicate if coherent modulation is supported.	
	TOUE	Indicate if an EAP-PASK server is implemented by the DUT.	
FEATURE_EAP_SERVER	TRUE	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 IUT.	



Annex 3: Copy of test report cover sheet



G3-PLC Certification Test Report

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G3-PLC Alliance

G3-PLC Platform Certification Test Report

Vendor Name

ATMEL

Model Name

ATPL250A

Sertal Nº

01510081002

HW version

Mother B: ATPL250ABN v2 Daughter B: ATPLCOUP007 v1

Test Report #

Date

. TR_LAN16AF006 Ed.00 February 15, 2016

CONF Tests Specification CONF Tests Suite IOT Tests Specification

version 0.19, 01/09/2015 version 2.1. 10/2015 version 0.7. 21/04/2015 10/2015 version 2.1.

IOT Tests Suite Test Tool Tester Modern

version 1.7 version 1.09

Certification Test Procedures Version 1.6. 31/12/2015

Certification Profile

Role

A (CENELEC A) **PAN Coordinator**

Overall Verdict





Initiation	Date	Description of modification	Ed.
Imar DIOUP	Petrusry 15, 2016	Country	
	Realised by	Checked by	Approved by
Name	Orner DICLIP	Vincent BUCHOLIX	Thistry DOLKSB2
Dobe	February 15, 2016	February 15, 2018	February 15, 2016
älign	AW/	V.B./x	E23-