G3-PLC CERTIFIED FCC

C E R T I F I C A T E

Certificate registration number: G3.1811.264.2.C3

Certificate holder: Smart Metering Solution (Changsha) Co., Ltd.

Product designation: IM150,
Hardware version IM150 V1.1, Firmware version G3_v1.3.1

Certification date: November 28th, 2018

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 November 2018. The results and remarks can be found in the complete test report.

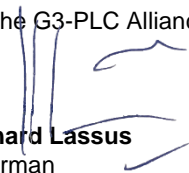| Applied tests	Performed by	Document evidence
Conformance, interoperability and performance testing according to the test specification referenced by the test report	Laboratoire des Applications Numériques (LAN)	LAN18AF078

The device tested is a G3-PLC FCC 1-phase meter. The meter is equipped with the G3-PLC certified platform aMeter150 with certificate no. G3.1811.256.1.C3. 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 28th, 2018.

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 28th, 2018

For the G3-PLC Alliance:

Bernard Lassus
Chairman

Madeleine Francillard
Chair Certification Program

G3-PLC Alliance

Annex 2: 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_MODULATION	TRUE	Indicate if coherent modulation is supported.
FEATURE_EAP_SERVER	FALSE	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 1-phase meter. Testing was performed on phase 1.

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

Name	Value	Unit	Description

PICS related to performance
are available
through vendor only.

Annex 2: Protocol Implementation Conformance Statement (PICS)

PICS related to performance (2/2)

Name	Value	Unit	Description

PICS related to performance are available through vendor only.

Annex 3:
Copy of test report cover sheet

L·A·N Your digital lab

G3-PLC Certification Test Report		
Smart Metering Solutions (Changsha) Co., Ltd.	IM150 HW:IM150 V1.1 FW: G3_v1.3.1	
LAN18AF078	Ed.00 November 23, 2018	Page 1/46

G3-PLC Alliance

G3-PLC Product Certification Test Report

Vendor Name	**Smart Metering Solutions (Changsha) Co., Ltd.**
Model Name	**IM150**
Serial N°	**20180801**
HW version	**IM150 V1.1**
FW version	**G3_v1.3.1**
Test Report #	**TR_LAN18AF078 Ed.00**
Date	**November 23, 2018**

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 1.12	08/04/2018

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

Initiation	Date	Description of modification	Ed.
Omar DIOUF	November 23, 2018	Creation	00

	Realised by	Checked by	Approved by
Name	Omar DIOUF	Vincent BUCHOUX	Thierry DOLIGEZ
Date	November 23, 2018	November 23, 2018	November 23, 2018
Sign			