

#### CERTIFICATE

Certificate registration number: G3.1712.182.2.C3

Certificate holder: SHENZHEN INHEMETER CO., LTD

Product designation: DDZ1513,

Hardware version INHE-SKI1-6D-MCU VER:A2-20150601, Firmware version FCC 2.02.01

Certification date: December 28th, 2017

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 TÜV Rheinland in Yokohama, Japan in November 2017. 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<br>Japan | 50110213 001      |

The device tested is a G3-PLC FCC 1-phase meter. The meter is equipped with the G3-PLC certified platform REL-G3PLC-CPX2 with certificate no. G3.1709.160.1.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 December 28<sup>th</sup>, 2017.

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.

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, December 28th, 2017

For the G3-PLC Alliance:

Bernard Lassus 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>

Page 1 of 6



# **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_MODULAT ION            | 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_COEXISTE NCE_MECHANISM | FALSE | Indicate if the preamble-based coexistence mechanism is used by the IUT.       |  |



Certificate registration number: G3.1712.182.2.C3

Page 2 of 6



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

PICS related to performance (1/2)

The device tested is a G3-PLC FCC 1-phase meter.

Operating voltage applied for certification testing was 230V/50Hz. The certification test was performed with module whose serial number is M372174300008.

Value Unit

| 7 | 1 311 31 3 |       |                           |     |
|---|------------|-------|---------------------------|-----|
|   |            |       |                           |     |
| -                                       |            |       |                           | /// |
|   |            |       | mance                     |     |
|   |            | A + 1 | o performance             |     |
| DICS.                                   | relat      | ea u  | o performance<br>vailable |     |
| Pics                                    | 2          | re al | Vallable                  |     |
|   |            | 1,0   | vendor only.              |     |
| -                                       | thro       | ugn   | vendor only.              |     |
|   |            |       |                           |     |
|   |            |       |                           |     |
|   |            |       |                           |     |
|   |            |       |                           |     |

Certificate registration number: G3.1712.182.2.C3

Page 3 of 6



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

PICS related to performance (2/2)

| Name | Value                  | Unit  | Description                               |
|------|------------------------|-------|---|
| P    | ics relat<br>a<br>thro | ed to | o performance<br>vailable<br>vendor only. |

Certificate registration number: G3.1712.182.2.C3

Page 4 of 6



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

**Produkte** 



**Products** Prüfbericht - Nr.: 50110213 001 Seite Page Test Report No. Auftraggeber: SHENZHEN INHEMETER CO., LTD Client: 8/F & 9/F,1A, Software Park, Southern Hi-Tech Zone, Nanshan District, Shenzhen, China 1-phase meter (FCC PAN Device) Gegenstand der Prüfung: Test item: **DDZ1513** 37990030803 Bezeichnung: Serien-Nr.: Identification: Serial No. Eingangsdatum: 2017-11-06 Wareneingangs-Nr.: A000661015 Receipt No .: Date of receipt: Zustand des Test item complete and undamaged Prüfgegenstandes bei Anlieferung: Condition of test item at delivery: TÜV Rheinland Japan Ltd. Prüfort: Testing location: Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan Prüfgrundlage: G3-PLC Conformance L1-L2 Tests Suite Specification v0.25 Test specification: G3-PLC 1-to-1 Interoperability Tests Suite Specification v0.10 G3-PLC Performance Test Suite Specification v0.23 G3-PLC Certification Test Procedures v1.11 Prüfergebnis: Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). Test Result. The test item passed the test specification(s) Prüflaboratorium: TÜV Rheinland Japan Ltd. Testing Laboratory: Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan geprüft/ tested by: kontrolliert/ reviewed by: Shuji Saito Tam Tran Thanh 2017-12-05 2017-12-08 Name/Stellung Datum Name/Stellung Unterschrift Datum Unterschrift Name/Position Name/Position Sonstiges I Other Aspects. = entspricht Prüfgrundlage = entspricht nicht Prüfgrundlage = nicht anwendbar Abkürzungen: OK, Pass Abbreviations

Dieser Prüfbericht bezieht sich nur auf den o.g. Prüfgegenstand und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report relates to the a. m. test item. 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 on this or similar products

Certificate registration number: G3.1712.182.2.C3

Page 5 of 6