

#### C E R T I F I C A T E

Certificate registration number: G3.1910.330.2.A4

Certificate holder: Inhemeter Co., Ltd.

Product designation: i210,

Hardware version i210-SPGR2-BS-A0, Firmware version 3.04.00

Certification date: October 25th, 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 CENELEC A 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 September 2019. 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 Japan | 50269902 001      |

The device tested is a G3-PLC CENELEC A 1-phase meter. The meter is equipped with the G3-PLC certified platform REL-G3PLC-CPX3 with certificate no. G3.1907.304.1.A4. 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 October 25<sup>th</sup>, 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, October 25th, 2019

For the G3-PLC Alliance:

Marc Delandre Chairman Melle

Madeleine Francillard Chair Certification Program





# **Annex 1: 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                 | 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.       |  |
|   |           | The man  |  |



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

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

The device tested is a G3-PLC CENELEC A 1-phase meter. Testing was performed on phase 1.

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

| Name | value | Ullit | Description               |
|------|-------|-------|---------------------------|
| PICS | relat | ed to | o performance<br>vailable |
|      | thro  | ugh   | vallable<br>vendor only.  |

I MX



# **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

**Produkte** 



| Products   |                                |  | L  | 10VI  | Kneinland   |
|--|--------------------------------|--|--|---|---|
| <b>Prüfbericht-Nr.:</b><br>Test Report No.:      | 5026990                        | 2 001  | Auftrags-Nr.:<br>Order No.:  | 150113463   | Seite 1 von of 42<br>Page 1 von of 42   |
| Kunden Referenz-Nr.<br>Client Reference No.:     | . N/A                          |  | Auftragsd<br>Order date  |   | 7-03  |
| Auftraggeber:                                    | Inhemo                         | eter Co., Ltd.   |  |   |   |
| Client:  |                                | F, 1A, Software<br>hen, China  | Park, Southern   | Hi-Tech Zone,   | Nanshan District,   |
| Gegenstand der Prüf<br>Test item:                | ung: G3-PL                     | C 1-phase CENI   | ELEC-A meter   |   |   |
| Bezeichnung / Typ-No<br>Identification / Type No |                                |  |  |   |   |
| Auftrags-Inhalt:<br>Order content:               | G3-PL                          | C Certification 1  | Гest   |   |   |
| Prüfgrundlage:<br>Test specification:            | G3-PL0<br>G3-PL0               | C 1-to-1 Interop<br>C Performance  | L1-L2 Test Suit<br>erability Test Su<br>Test Suite Spec<br>Fest Procedures | ite Specification ification if  |   |
| Wareneingangsdatun<br>Date of receipt:           | n: 2019-0                      | 9-10   |  | GAL Matter 1900-31  |   |
| Prüfmuster-Nr.:<br>Test sample No.:              | A00100                         | 1435   |  | 110 ft/d) | tages of Tech James.  |
| Prüfzeitraum:<br>Testing period:                 | 2019-09                        | 9-18 – 2019-09-2   | 20   | 1210<br>0.2/13<br>1300000000  | -455355<br>   |
| Ort der Prüfung:<br>Place of testing:            | Global Assess<br>Kita-Ya       | neinland Japan<br>Technology<br>ment Center 4-2<br>mata, Tsuzuki-ki<br>ma 224-0021, Ja | 5-2<br>u   | 2001 2014 50145000 1 2014 2014 5014500 1 2014 5014500 1 2014 5014 5014 5014 5014 5014 5014 5014 5   | ECCEPTO THE STATE OF THE STATE |
| Prüflaboratorium:<br>Testing laboratory:         | TÜV R                          | neinland Japan L   | td.  |   |   |
| Prüfergebnis:<br>Test results:                   |                                | t item passed the  | e  |   |   |
| <b>Geprüft von</b><br>Tested by:                 | - Black                        | W  | Kontrollie<br>Reviewed   |   | Studies   |
| 2019-10-07, Tam Tran                             | Thanh                          |  | 2019-10-07   | , Atsuhiro Endo   |   |
|  | ne / Stellung<br>ne / Position | Unterschrift<br>Signature  | Datum<br>Date  | Name / Stellu<br>Name / Positi  |   |

Name / Position Signature

Sonstiges I Other Aspects:

Zustand des Prüfgegenstandes bei Anlieferung: Prüfmuster vollständig und unbeschädigt Condition of the test item at delivery: Test item complete and undamaged

\*Legende: 1 = sehr gut 5 = mangelhaft 3 = befriedigend P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet 1 = very good 2 = good3 = satisfactory 4 = sufficient P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable

Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. 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

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