



C E R T I F I C A T E

**Certificate registration number:** G3.2009.410.2.C4

**Certificate holder:** Shenzhen Star Instrument Co., Ltd.

**Product designation:** DDS26D,  
Hardware version K131-V2, Firmware version MBUZ104-03 V100R100

**Certification date:** September 24<sup>th</sup>, 2020

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 June and September 2020. 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) | LAN20AF034        |

The device tested is a G3-PLC FCC 1-phase meter. The meter is equipped with the G3-PLC certified platform ST8500 with certificate no. G3.1911.355.1.C4. Modifications of the platform that are not related to the G3-PLC protocol 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 September 24<sup>th</sup>, 2020.

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, September 24<sup>th</sup> 2020

For the G3-PLC Alliance:

**Marc Delandre**  
Chairman

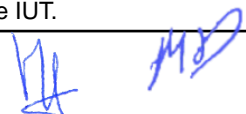
**Madeleine Francillard**  
Chair Certification Program



# 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_MODULATION            | TRUE  | Indicate if coherent modulation is supported.  |
| FEATURE_EAP_SERVER                     | FALSE | Indicate if an EAP-PASK server is implemented by the DUT.<br>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 |
|---|-------|------|-------------|
| <p>PICS related to performance are available through vendor only.</p> |       |      |             |





# Annex 2: Protocol Implementation Conformance Statement (PICS)

PICS related to performance (2/2)

| Name  | Value | Unit | Description |
|---|-------|------|-------------|
| <p>PICS related to performance are available through vendor only.</p> |       |      |             |

# Annex 3: Copy of test report cover sheet



| G3-PLC Certification Test Report   |   |                    |           |
|------------------------------------|---|--------------------|-----------|
| Shenzhen Star Instrument Co., Ltd. | DDS26D HW:K131-V2 FW: MBUZ104-03 V100R100 |                    |           |
| LAN20AF034                         | Ed.00                                     | September 22, 2020 | Page 1/45 |



## G3-PLC Product Certification Test Report

Vendor Name **Shenzhen Star Instrument Co., Ltd.**  
 Model Name **DDS26D**  
 Serial N° **2005699001**  
 HW version **K131-V2**  
 FW version **MBUZ104-03 V100R100**

Test Report # **TR\_LAN20AF034 Ed.00**  
 Date **September 22, 2020**

CONF Tests Specification **version 0.30**      **03/12/2018**  
 CONF Tests Suite **version 2.9.p1**      **09/2019**  
 IOT Tests Specification **version 0.13**      **28/12/2018**  
 IOT Tests Suite **version 2.6.p1**      **09/2019**  
 PERF Tests Specification **version 0.27**      **05/03/2019**  
 PERF Tests Suite **version 2.9.p1**      **09/2019**

Test Tool **version 2.3**  
 Tester Modem **version 2.0**  
 Certification Test Procedures **version 1.14**      **21/09/2019**

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



| Initiation | Date               | Description of modification | Ed. |
|------------|--------------------|-----------------------------|-----|
| Omar DIOUF | September 22, 2020 | Creation                    | 00  |

|      | Realised by        | Checked by         | Approved by        |
|------|--------------------|--------------------|--------------------|
| Name | Omar DIOUF         | Vincent BUCHOUX    | Thierry DOLIGEZ    |
| Date | September 22, 2020 | September 22, 2020 | September 22, 2020 |
| Sign |                    |                    |                    |

The current report and the test results produced in this current are given for information only and must not be relied on by any third person for any reason.

This report contains an assessment of the apparatus carried out on samples submitted to the laboratory. The results in this report relate only to the items tested and were obtained in the period between the initial receipt of samples and the issue of the report. It should be noted that technical hardware or software modifications on the apparatus may impact the results reported in this document.