G3-PLC CERTIFIED CEN A HYB

C E R T I F I C A T E

Certificate registration number: G3.2303.565.2.A6v2

Certificate holder: Shenzhen Star Instrument Co., Ltd.

Product designation: DTSY23S CENA,
Hardware version K353-AA, Firmware version MH324-101 V100R100

Certification date: March 3rd 2023

This certificate indicates the above-mentioned product successfully completed certification testing with regards to the G3-PLC Alliance reference specification 06/2021.

The device is certified for both G3-PLC and G3-Hybrid. The optional feature coherent mode of the G3 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 Laboratoire des Applications Numériques (LAN) in Tauxigny, France in February 2023. 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)	LAN22AF090

The device tested is a G3-Hybrid CENELEC A PLC+RF 3-phase meter. The meter is equipped with the G3-Hybrid certified platform HT8922 with certificate no. G3.2208.526.1.A6. 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 March 3rd 2023.

The certificate is only applicable to the product described above and permits the use of the G3-Hybrid™ logo as laid down in the 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-Hybrid. 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, March 3rd 2023
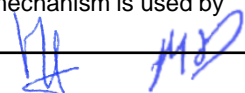
For the G3-PLC Alliance:

Marc Delandre
Chairman

Madeleine Francillard
Chair Certification Program

G3-PLC Alliance

Authenticity of this certificate can be verified at https://g3-plc.com/g3-plc-certification/certified-products/   Page 1 of 6

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Paris, March 3rd 2023

For the G3-PLC Alliance:

Marc Delandre
Chairman

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Chair Certification Program

G3-PLC Alliance

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
BAND_PLAN_RF	863-870_SingleCarrier_Mode#1 863-870_SingleCarrier_Mode#2 865-868_SingleCarrier_Mode#1 865-868_SingleCarrier_Mode#2 870-876_SingleCarrier_Mode#1 870-876_SingleCarrier_Mode#2	Indicate the RF band plan(s) supported by the device
FEATURE_HYBRID_RF	TRUE	Indicate if Hybrid PLC&RF feature is supported
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	Indicate if D8PSK modulation is supported
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-Hybrid CENELEC A PLC+RF 3-phase meter communicating on 1 phase. Testing was performed on phase 1.

Operating voltage applied for certification testing was 3 x 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

G3-PLC Alliance

G3-PLC Hybrid Product Certification Test Report

Vendor Name	**Shenzhen Star Instrument Co., Ltd.**
Model Name	**DTSY23S CENA**
Serial N°	**22229992270**
HW version	**K353-AA**
FW version	**MH324-101 V100R100**

Test Report #	**TR_LAN22AF090 Ed.00**
Date	**March 2, 2023**

CONF G3-PLC Tests Specification	version 0.37.	18/01/2022
CONF G3-PLC Tests Suite	version 2.14	02/2022
CONF HYBRID Tests Specification	version 0.10.	15/03/2021
CONF HYBRID Tests Suite	version 1.3.	12/2021
IOT G3-PLC Tests Specification	version 0.14.	11/11/20
IOT G3-PLC Tests Suite	version 2.7.	11/2021
IOT HYBRID Tests Specification	version 0.7.	14/09/2021
IOT RF Tests Suite	version 1.3.	03/2022
PERF G3-PLC Tests Specification	version 0.27.	05/03/2019
PERF G3-PLC Tests Suite	version 2.14.	02/2022

Test Tool PLC+RF	version 3.2	
Tester Modem PLC	version 2.0.1	
Tester Modem PLC+RF	version 7	
Certification Test Procedures	version 6.04	06/09/2022

Certification Profile	**HYBRID : CENELEC A - RF**
Role	**Meter**
Overall Verdict	**PASS**

Initiation	Date	Description of modification	Ed.
Omar DIOUF	March 2, 2023	Creation	00

	Realised by	Checked by	Approved by
Name	Omar DIOUF	Vincent BUCHOUX	Thierry DOLIGEZ
Date	March 2, 2023	March 2, 2023	March 2, 2023
Sign			