

#### CERTIFICATE

Certificate registration number: G3.2102.427.1.A4

Certificate holder: Qingdao Eastsoft Communication Technology Co., Ltd.

Platform designation: ESPLC-CEN,

Hardware version ESDS55-61-HW(v1.1), Firmware version ESG3SD-V000201

Certification date: February 23<sup>rd</sup>, 2021

This certificate indicates the above mentioned platform successfully completed certification testing with regards to the reference specification ITU G.9903 (08-2017).

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 February 2021. 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	JP21UG5D 002

The device tested is a G3-PLC platform: a solution providing an implementation of the G3-PLC specification. 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 February 23<sup>rd</sup>, 2021.

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, February 23rd, 2021

For the G3-PLC Alliance:

Marc Delandre Chairman NATIO

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

### PICS related to performance

The device tested is a G3-PLC CENELEC A platform. Operating voltage applied for certification testing was 220V / 50Hz.

PICS related to performance	PICS related to performance
are available	are available
are available	are available
through vendor only.	through vendor only.

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

Products



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Prüfbericht-Nr.: Test Report No.:	JP21UG5D 002	Auftrags-Nr.: Order No.:	150238386	Seite 1 von of 39 Page 1 von of 39
Kunden Referenz-Nr.: Client Reference No.:	N/A	<b>Auftragsda</b> Order date:	tum: 2021-0	)1-22
Auftraggeber:	Qingdao Eastsoft C	Communication Tecl	nnology Co.,	Ltd.
Client:	16A Shangqing Ro	ad, Qingdao 266023	, China	
Gegenstand der Prüfung Test item:	: G3-PLC CENELEC-	A Platform (PAN De	vice)	
Bezeichnung / Typ-Nr.: Identification / Type No.:	ESPLC-CEN			
Auftrags-Inhalt: Order content:	G3-PLC Certification	n Test		
Prüfgrundlage: Test specification:	G3-PLC 1-to-1 Inter G3-PLC Performan	nce L1-L2 Test Suite operability Test Sui ce Test Suite Specif on Test Procedures	te Specificati ication v0.27	
Wareneingangsdatum: Date of receipt:	2021-01-28			
Prüfmuster-Nr.: Test sample No.:	A002999132		2 3 5 5	<b>=</b>
Prüfzeitraum: Testing period:	2021-02-01 – 2021-0	2-02	41	
Ort der Prüfung: Place of testing:	TÜV Rheinland Jap Global Technology Assessment Center 4 Kita-Yamata, Tsuzuk Yokohama 224-0021	1-25-2 i-ku	ISV8	
Prüflaboratorium: Testing laboratory:	TÜV Rheinland Japa	n Ltd.		
Prüfergebnis: Test results:	The test item passed test specification(s).	the		000
Geprüft von Tested by:	Mau	Genehmigt Authorized		Short
2021-02-15, Tam Tran Tha	anh	2021-02-15	Atsuhiro Endo	
	Stellung Unterschrift		n Name / Stell	

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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 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft

P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet

Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor

P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested

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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# Annex 4: Additional details of the certified platform

Platform model name:	ESPLC-CEN
Platform hardware version:	ESDS55-61-HW(v1.1)
Platform firmware version:	ESG3SD-V000201
Exact part number of all the chips running G3-PLC stack in the certified platform:	SSC1655NQ
What each part number runs: lower MAC (incl. CSMA/CA) or PHY or other parts of the stack:	PHY, MAC and 6LowPAN
Hardware version of this chip:	Version A
Software version running on this chip:	ESG3SD-V000201
Internal CPU frequency:	20 MHz



