



C E R T I F I C A T E

Certificate registration number: G3.2204.504.2.C5

Certificate holder: Shijiazhuang Kelin Electric Co., Ltd.

Product designation: DTZY1277,
Hardware version V1.02, Firmware version ESG3SD-V000001

Certification date: April 2nd, 2022

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

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 March 2022. 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	JP217J4I 001

The device tested is a G3-PLC FCC 3-phase meter. The meter is equipped with the G3-PLC certified platform ESPLC-FCC with certificate no. G3.1911.348.1.C4. 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 April 2nd 2022.

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, April 2nd

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	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_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 3-phase meter communicating on 1 phase. Testing was performed on phase 1.

Operating voltage applied for certification testing was 3AC400V (3x230V L-N)/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

Prüfbericht - Produkte
Test Report - Products



Prüfbericht-Nr.: <i>Test report no.:</i>	JP217J4I 001	Auftrags-Nr.: <i>Order no.:</i>	150249258 10	Seite 1 von 48 Page 1 of 48
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	DTZY1277	Auftragsdatum: <i>Order date:</i>	2021-11-25	
Auftraggeber: <i>Client:</i>	Shijiazhuang Kelin Electric Co., Ltd., Nanjiangbi Hongqi Street, Shijiazhuang Hebei Province, P.R. China			
Prüfgegenstand: <i>Test item:</i>	Three Phase Four Wire Smart Energy Meter			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	DTZY1277			
Auftrags-Inhalt: <i>Order content:</i>	G3PLC			
Prüfgrundlage: <i>Test specification:</i>	G3 PLC Conformance Tests Specification v0.32 G3-PLC 1-to-1 Interoperability Tests Specification v0.13 G3-PLC Performance Test Suite Specification v0.27 G3-PLC Certification Test Procedures v2.0			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2022-03-15			
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003227495-002			
Prüfzeitraum: <i>Testing period:</i>	2022-03-17 - 2022-03-25			
Ort der Prüfung: <i>Place of testing:</i>	4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland Japan Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>				
Datum: <i>Date:</i>	2022-03-29	Ausstellungsdatum: <i>Issue date:</i>	2022-03-29	
Stellung / Position:	Tester	Stellung / Position:	Reviewer	
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		

* Legende: P(ass) = entspricht o.g. Prüfgrundlage(n) F(all) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet
* Legend: P(ass) = passed a.m. test specification(s) F(all) = 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.