



C E R T I F I C A T E

Certificate registration number: G3.1712.181.2.C3

Certificate holder: Shenzhen Star Instrument Co., Ltd.

Product designation: DTS27,
Hardware version DTS27--Z345A3-V10, Firmware version FCC 2.02.01

Certification date: December 28th, 2017

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 TÜV Rheinland in Yokohama, Japan in December 2017. 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	50106183 001

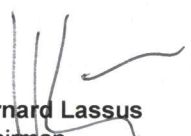
The device tested is a G3-PLC FCC 3-phase meter. The meter is equipped with the G3-PLC certified platform REL-G3PLC-CPX2 with certificate no. G3.1709.160.1.C3. The Protocol Implementation Conformance Statement in the Annex includes the PICS related to performance and is an integral part of this certificate. This certificate is valid from December 28th, 2017.

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, December 28th, 2017

For the G3-PLC Alliance:


Bernard Lassus
Chairman



Madeleine Francillard
Chair Certification Program





Annex 2: 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. 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.

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Annex 2: Protocol Implementation Conformance Statement (PICS)

PICS related to performance (1/2)

The device tested is a G3-PLC FCC 3-phase meter. Testing was performed on phase 3 with module whose serial number is 1413.

Operating voltage applied for certification testing was 120V L-N (208V L-L)/60Hz.

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



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

Produkte
Products



Prüfbericht - Nr.: <i>Test Report No.</i>	50106183 001	Seite <i>Page</i>	1 of	von <i>of</i>	44
Auftraggeber: <i>Client:</i>	Shenzhen Star Instrument Co., Ltd. 23/F., Coastal Building(west), Haide 3rd Road, Nanshan District, Shenzhen, China, Post Code: 518054.				
Gegenstand der Prüfung: <i>Test item:</i>	3-phase meter (FCC PAN Device)				
Bezeichnung: <i>Identification:</i>	DTS27	Serien-Nr.: <i>Serial No.</i>	22179991413		
Wareneingangs-Nr.: <i>Receipt No.:</i>	A000670172	Eingangsdatum: <i>Date of receipt:</i>	2017-12-04		
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of test item at delivery:</i>	Test item complete and undamaged				
Prüfört: <i>Testing location:</i>	TÜV Rheinland Japan Ltd. Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan				
Prüfgrundlage: <i>Test specification:</i>	G3-PLC Conformance L1-L2 Tests Suite Specification v0.25 G3-PLC 1-to-1 Interoperability Tests Suite Specification v0.10 G3-PLC Performance Test Suite Specification v0.23 G3-PLC Certification Test Procedures v1.11				
Prüfergebnis: <i>Test Result:</i>	Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>				
Prüflaboratorium: <i>Testing Laboratory:</i>	TÜV Rheinland Japan Ltd.: Global Technology Assessment Center 4-25-2 Kita-Yamata, Tsuzuki-ku Yokohama 224-0021, Japan				
geprüft/ tested by:	2017-12-18 , Tam Tran Thanh <i>Date Name/Position</i>		2017-12-21 , Shuji Saito <i>Date Name/Position</i>		
	<i>Unterschrift</i>	<i>Signature</i>	<i>Unterschrift</i>	<i>Signature</i>	
Sonstiges / Other Aspects:					
Abkürzungen:	OK, Pass = entspricht Prüfgrundlage	Fail = entspricht nicht Prüfgrundlage	N/A = nicht anwendbar	Abbreviations: OK, Pass = passed Fail = failed N/A = not applicable	
Dieser Prüfbericht bezieht sich nur auf den o.g. Prüfgegenstand und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test item. 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 on this or similar products.</i>					

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