

## IEC 61850 Certificate Level A1

No. 2016PUCA0049

Issued to:

Tianjin keyvia Electric Co.Ltd. No.15 HaitaiFazhanErlu Road,Binhai Hi-tech Industrial Huayuan Development Area(Outer Ring), Tianjin, P.R.China 300392 For the product:

KF6582 Multi-function Automatic Transfer Controller Software Version: V1.4

Issued by: **KEOP**开警

The server product has not been shown to be non-conforming to:

## IEC 61850 First Edition Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems in substations.

The conformance test has been performed according to IEC 61850-10, the UCA International Users Group Device Test Procedures version 3.03, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement (PICS) for KF6582 Multi-function Automatic Transfer Controller", "Modeling Implementation Conformance Statement(MICS) for KF6582 Multi-function Automatic Transfer Controller", "IEC 61850 Tissues Conformance Statement (TICS) for KF6582 Multi-function Automatic Transfer Controller" and the extra information for testing: "Protocol implementation extra information (PIXIT) of the IEC 61850 communication interface in KF6582 Multi-function Automatic Transfer Controller".

The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

- 1 Basic Exchange (22/24)
- 2 Data Sets (3/6)
- 3 Substitution(4/4)
- 4 Setting Group Selection (3/3)
- 4+ Setting Group Definition (7/7)
- 5 Unbuffered Reporting (15/18)

- 6 Buffered Reporting (22/27)
- 9a GOOSE publish (8/12) 12d Enhanced SBO control(11/19)
- 13 Time sync (3/5)
- 14 File transfer (4/7)

This Certificate includes a summary of the test results as carried out at Xuchang KETOP Testing Technology Co., Ltd in Xuchang, China with UniCAsim 61850 Client Version 4.29.03 with test suite Version 3.31.00 and the UniCA 61850 analyzer Version 5.31.00. This document has been issued for information purposes only, and the original paper copy of the KETOP Lab report: No. JW162614 will prevail.

The test have been carried out on one single specimen of the product as referred above and submitted to KETOP Lab by Tianjin keyvia Electric Co.Ltd. The manufacturer's production process has not been assessed. This certificate does not imply that KETOP Lab has approved any product other than the specimen tested.

Xuchang, Dec 27th, 2016

极春

He Chun

Director of PRTC Department

银庆年

Yin Qingwei Test Engineer

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This certificate is issued in accordance with the laboratory accreditation requirements of the UCA International Users Group. This certificate shall only be reproduced in full and with the express permission of KETOP lab.

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<sup>&</sup>lt;sup>1</sup> Level A - Independent Test lab with ISO 17025 Quality System



Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4,	AssN3, Srv6, Srv7, Srv8, Srv9,
	AssN5	Srv10, SrvN1e, SrvN1f, SrvN3
	Srv1, Srv2, Srv3, Srv4, Srv5,	
	SrvN1abcd, SrvN4	
2: Data Sets	Dset1, Dset10a, DsetN1ae	
3: Substitution	Sub1, Sub2, Sub3, SubN1	
4: Setting Group Selection	Sg1, SgN1a	Sg3
4+: Setting Group Definition	Sg2, Sg4	
	SgN1b, SgN2, SgN3, SgN4, SgN5	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp9,	Rp5, Rp8, Rp11, Rp12, RpN5
	RpN1, RpN2, RpN3, RpN4, RpN8	
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br9, Br20, Br21,	Br5, Br8, Br11, Br12
	Br22, Br25, Br26, Br27, Br28	
	BrN1, BrN2, BrN3, BrN4, BrN5, BrN8	
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop9, Gop10a	Gop1, Gop6, GopN1
12d: Enhanced SBO control	CtlN1, CtlN2, CtlN3, CtlN4, CtlN9	Ctl3, CtlN6, CtlN11
	SBOes1, SBOes2, SBOes3	
13: Time sync	Tm1, Tm2	TmN1
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	