



IEC 61850 Certificate Level A¹

No. 2015PUCA0001

Issued to:

Shanghai Schneider Electric Power Automation Co.,Ltd.
No.833, Kangqiao Road, Pudong District, Shanghai,
201315, P.R.China

For the product:

MiCOM P443 Fast Multifunction Distance Protection
Software Version: VD1.B

Issued by:



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 2.3 with test procedures change list version 1.7.7, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement (PICS) for MiCOM P443 Fast Multifunction Distance Protection", "Modeling Implementation Conformance Statement(MICS) for MiCOM P443 Fast Multifunction Distance Protection", "IEC 61850 Tissues Conformance Statement (TICS) for MiCOM P443 Fast Multifunction Distance Protection", the extra information for testing: "Protocol implementation extra information (PIXIT) of the IEC 61850 communication interface in MiCOM P443 Fast Multifunction Distance Protection".

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)	12a Direct control(4/11)
2 Data Sets (3/6)	12b SBO control(7/14)
4 Setting Group Selection(3/3)	12c Enhanced Direct Control(6/13)
5 Unbuffered Reports (15/18)	12d Enhanced SBO Control(11/19)
6 Buffered Reporting (17/19)	13 Time sync(3/5)
9a GOOSE publish(13/13)	14 File transfer (6/7)
9b GOOSE subscribe(11/11)	

This Certificate includes a summary of the test results as carried out at the KETOP Lab's offices in Xuchang, China with UniCasim 61850 Client Version 4.26.04 with test suite Version 3.26.00 and the UniCA 61850 analyzer Version 5.27.07. This document has been issued for information only, and the original paper copy of the KETOP Lab report: No. JW150181 will prevail.

The test have been carried out on one single specimen of the product as referred above and submitted to KETOP Lab by MiCOM P443 Fast Multifunction Distance Protection. 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, Mar 22th, 2015

He Chun
Director of PRTC Department

Yin Qingwei
Test Engineer

¹ Level A - Independent Test lab with ISO 17025 Quality System

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Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 2.3 with TPCL version 1.7.7

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, Srv6, Srv7, Srv8, Srv9, Srv10, SrvN1e, SrvN1f, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
4: Setting Group Selection	Sg1, SgN1a, Sg3	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, RpN1, RpN2, RpN3, RpN4	Rp5, Rp6, Rp7, Rp8, Rp10, Rp12, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br8, Br9, BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br6, Br7, Br10, Br12, Br14
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a	Gop1, Gop5, Gop6, Gop8, Gop10b, GopN1, GopN2,
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b, Gos4
12a Direct control	CtlN3, DOns1	CtlN11, DOns3
12b SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4 SBOs2	CtlN11
12c Enhanced Direct Control	CtlN3, CtlN8 DOes2, DOes5	CtlN6, CtlN11
12d Enhanced SBO control	CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3	Ctl3, CtlN6, CtlN11
13 Time sync	Tm1, Tm2	TmN1
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, FtN1c

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