



IEC 61850 Certificate

Level A1

No. D 17 04 89191 014

Issued to:

Schneider Electric Industries SAS 35 rue Joseph Monier, 92500 Rueil-Maimaison, France

For the server product:

MiCOM P532

Modular Line-Differential Protection and Bay

Control Unit

Software Version: 660-250

Issued by: TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD SHANGHAI BRANCH Communication Protocols No.16 Lane 1951 Duhui Road Shanghai, 201 108, People's Republic of China

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

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

Communication networks and systems for power utility automation

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL2 version 1.2 with product's protocol, model and technical issue implementation conformance statements: "PX532-660-250 PICS.pdf", "PX532-660-250 MICS.pdf", "Px3x TICS ED2.pdf" and product's extra information for testing: "Px3x PIXIT with control ED2.pdf".

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

- Basic Exchange (21/26)
- Data Sets (4/7)
- Unbuffered Reporting (19/21)
- Buffered Reporting (28/30)

9a GOOSE Publish (10/13)

9b GOOSE Subscribe (12/14)

12a Direct Control (9/18)

12c Enhanced Direct Control (11/20)

12d Enhanced SBO Control (17/28)

13 Time Synchronization (4/7)

14 File Transfer (5/8)

This Certificate includes a summary of the test results as carried out at TÜV SÜD Certification and Testing (China) Co., Ltd Shanghai Branch in P.R. China with SimFlex CS Ed.2 version 2.0 with test suite 1.0-1.2-v0.1 and Wireshark version 1.12.1. This document has been issued for information purposes only, and the original paper copy of the TÜV SÜD report: No. 7482117509-TRTR705001600310, version V1-0 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to TÜV SÜD by Schneider Electric Industries SAS. The manufacturer's production process has not been assessed. This certificate does not imply that TÜV SÜD has certified or approved any product other than the specimen tested.

Shanghai, May 18, 2017

Oinbo ZHOU

Technical Certifier

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

² Test Procedure Change List





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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL version 1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv8, sSrv12, sSrvN1e, sSrvN1f, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15,
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, sRp13, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr15, sBr20, sBr21, sBr22, sBr25. sBr26, sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr8, sBr10, sBr11, sBr12, sBr13, sBr23, sBr24
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11	sGop1, sGop5, , sGop7, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	
12a Direct control	sCtI5, sCtI10, sDOns1, sDOns2	sCtl7, sCtl13, sCtl15, sCtl16, sCtl17
12c Enhanced Direct Control	sCtl5, sCtl10, sDO es1, sDO es2	sCtl7, sCtl13, sCtl14, sCtl15, sCtl16, sCtl17, sCtl26
12d Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4, sCtl6, sCtl7, sCtl15, sCtl16, sCtl17, sCtl26
13 Time sync	sTm1, sTm2, sTmN1	sTm3
14 File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	