

## IEC 61850 Certificate Level B<sup>1</sup>

No.Schneider\_VAL\_MiCOM\_P435\_660-250\_Ed2

**Issued to:** Schneider Electric Industries SAS 35 rue Joseph Monier, 92500 Rueil-Maimaison, France **For the server product:** MiCOM P435 Distance Protection and Control Unit Software version: 660-250

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 TPCL<sup>2</sup> 1.2.1 with product's protocol, model and technical issue implementation conformance statements: "PX435-660-250 PICS.pdf", "PX435-660-250 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 cases):

1	Basic Exchange (21/26)	9a	GOOSE Publish (10/13)
2	Data Sets (4/7)	9b	GOOSE Subscribe (12/14)
5	Unbuffered Reports (19/21)	12a	Direct Control (9/18)
6	Buffered Reports (28/30)	12c	Enhanced Direct Control (10/20)
		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 Schneider Electric IEC61850 lab in China with UniCASim 61850 client simulator 4.31.02 with test suite v4.32.03 and UniCA Analyzer 5.31.00. This document has been issued for information purposes only, and the original paper copy of the Schneider Electric IEC61850 lab report: No. Schneider\_VAL\_MiCOM\_P435-660-250\_Ed2\_RPT\_01\_V1 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to Schneider Electric IEC61850 lab by Schneider Electric. The manufacturer's production process has not been assessed. This certificate does not imply that Schneider Electric IEC61850 lab has certified or approved any product other than the specimen tested

Shanghai, February 26, 2017

Baohua Wang IED Validation Manager

Issued by:



余春燕

Chunyan YU IEC61850 Test Engineer

<sup>1</sup> Level B \_ Tester lab [following ISO 9001] [with certified [ISO 9001] Quality System] <sup>2</sup> 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 1.2.1

Conformance Block	nformance Block Mandatory	
1: Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3,	sAssN6, sSrv6, sSrv8,
	sAssN4, sAssN5, sSrv1, sSrv2, sSrv3,	sSrv12, sSrvN1e,
	sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sSrvN1f, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9,	sRp8, sRp10, sRp11,
	sRp14, sRp15, sRpN1, sRpN2, sRpN3,	sRp12, sRp13, sRpN5
	sRpN4, sRpN8	
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14,	sBr8, sBr10, sBr11,
	sBr15, sBr20, sBr21, sBr22, sBr25, sBr26,	sBr12, sBr13, sBr23,
	sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4,	sBr24
	sBrN5, sBrN8	
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10,	sGop1, sGop5,
	sGop11	sGop7,sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a,	
	sGos7, sGosN1, sGosN2, sGosN3, sGosN4,	
	sGosN5, sGosN6	
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl7, sCtl13, sCtl15,
		sCtl16, sCtl17
12c: Enhanced Direct control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl7, sCtl13, sCtl15,
		sCtl16, sCtl17, sCtl26
12d: Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25,	sCtl4, sCtl6, sCtl7,
	sSBOe1, sSBOe2, sSBOes6, sSBOes8	sCtl15, sCtl16, sCtl17,
		sCtl26
13: Time sync	sTm1, sTm2, sTmN1	sTm3
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	