



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



No. Schneider\_VAL\_MiCOM\_P746\_C1\_Ed2

Issued to:  
Schneider Electric  
35 rue Joseph Monier  
92500 Rueil Malmaison  
France

For the server product:  
MiCOM P746  
Software version: C1  
Hardware version: M

Issued by:  
Schneider Electric  
IEC61850 Laboratory - 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 TPCL<sup>2</sup> version 1.0 with product's protocol, model and technical issue implementation conformance statements: "MiCOM P74x Numerical Protection Relay Protocol Implementation Conformance Statement (P746/EN PM/D42)", "MiCOM P74x Numerical Protection Relay Model Implementation Conformance Statement (P746/EN MC/D42)", "MiCOM P74x Numerical Protection Relay Technical Issues Conformance Statement (P746/EN TC/D42)" and the extra information for testing: "MiCOM P74x Numerical Protection Relay Protocol Implementation eXtra Information for Testing (P746/EN PX/D42)".

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 (23/26)	12a	Direct Control (6/20)
2	Data Sets (4/7)	12b	SBO Control (12/28)
4	Setting Group Selection (4/4)	12c	Enhanced Direct Control (6/20)
5	Unbuffered Reports (18/20)	12d	Enhanced SBO Control (12/28)
6	Buffered Reports (27/29)	13	Time Synchronization (6/7)
9a	GOOSE Publish (12/13)	14	File Transfer (7/8)
9b	GOOSE Subscribe (13/14)		

This Certificate includes a summary of the test results as carried out at Schneider Electric IEC61850 lab in China with UniCASim 61850 client simulator 4.28.04 with test suite v3.27.12 and UniCA Analyzer 5.28.03. 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\_P746\_C1\_Ed2\_RPT\_01 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, 2014-12-01

Baohua WANG  
IED Validation Manager

Gang LI  
IEC61850 Test Engineer

<sup>1</sup> Level B – Test lab 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 version 1.0.

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv8, sSrv9, sSrv10, sSrv12, sSrvN1e, sSrvN1f, sSrvN3
2: Data Sets	sDs1, sDs10a, sDs15, sDsN1ae	
4: Setting Group Selection	sSg1, sSg3, sSg11, sSgN1	
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp9, sRp14, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp5, sRp8, sRp10, sRp11, sRp12, sRp13, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr9, sBr14, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr5, sBr8, sBr10, sBr11, sBr12, sBr13, sBr23, sBr24
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop7, sGop9, sGop10, sGop11	sGop1, sGop5, sGop6, sGopN1, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos6b
12a: Direct control	sCtl5, sCtl10, sCtl14, sDOns1, sDOns2	sCtl13
12b: SBO control	sCtl5, sCtl6, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl4, sCtl27
12c: Enhanced Direct control	sCtl5, sCtl10, sCtl14, sDOes1, sDOes2	sCtl13
12d: Enhanced SBO control	sCtl5, sCtl6, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4
13: Time sync	sTm1, sTm2, sTmN1	sTm3, sTm4, sTm5
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFtN1c