



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

No. Schneider\_VAL\_BMRZ-LT\_version-50203-01\_Ed2\_Certificate

Issued to:  
"MECHANOTRONIKA" LTD  
Bld. 23 A, str. Pionerstroya  
St. Petersburg, 198206 - Russia

For the server product:  
BMRZ-LT  
Software version: 50203-01  
Hardware version: 648228.080

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 1.1.1 with product's protocol, model and technical issue implementation conformance statements: "BMRZ-LT\_PICS\_Ed2 version 2.01", "MICS\_BMRZ\_LT\_ver.1.1" and "BMRZ-LT\_TICS\_Ed2 version 2.01" and product's extra information for testing: "BMRZ-LT\_PIXIT\_Ed2 version 2.01".

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

1 Basic Exchange (23/26)	9a GOOSE Publish (11/13)
2 Data Sets (4/7)	9b GOOSE Subscribe (12/14)
2+ Data Set Definition (22/24)	12a Direct Control (5/18)
4 Setting Group Selection (4/4)	12b SBO Control (10/27)
5 Unbuffered Reporting (19/20)	13 Time Synchronization (5/7)
6 Buffered Reporting (26/29)	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 client simulator UniCASim 61850 version 4.29.03 with test suite version 3.29.01 and analyzer UniCA version 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\_BMRZ-LT\_version-50203-01\_Ed2\_RPT 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 MECHANOTRONIKA in Russia. 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, January 15<sup>th</sup>, 2016

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IED Validation Manager

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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 1.1.1

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, sDsN1ae	sDs15
2+: Data Set Definition	sDs2, sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs9, sDs11, sDs12, sDs13, sDs14, sDsN1cd, sDsN2, sDsN3, sDsN4, sDsN5, sDsN6, sDsN7, sDsN8, sDsN9, sDsN10	
4: Setting Group Selection	sSg1, sSg3, sSgN1	sSg11
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp9, sRp14, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, 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	sBr6, sBr7, sBr8, sBr10, sBr11, sBr12, sBr13
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop7, sGop9, sGop10, sGop11	sGop1, sGop5, sGop6, sGopN1
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl13
12b: SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOs1, sSBOs2, sSBOs6	sCtl27
13: Time sync	sTm1, sTm2, sTmN1	sTm3, sTmN2
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	