



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

Issued to:

Beijing Sifang Automation Co., Ltd. No.9, Shangdi 4<sup>th</sup> Street, Haidian District 100085, Beijing China For the client system:

CSI-200E-ER RTU Firmware version: V1.0.1

S/N: SFJB 400009622124000001

The client system has not been shown to be non-conforming to:

## IEC 61850 Edition 2 Amendment 1 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 Edition 2 with Amendment 1, the UCA International Users Group Edition 2 with Amendment 1 Client Conformance Test Procedures version 1.0 with client system's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for testing (PICS) for IEC61850 client interface in CSI-200E-ER, V1.00", "Model Implementation Conformance Statement for testing (MICS) for IEC61850 client interface in CSI-200E-ER, V1.00", "TISSUEs Implementation Conformance Statement for testing (TICS) for IEC 61850 client interface in CSI-200E-ER, V1.00" and product's extra information for testing: "Protocol Implementation eXtra Information for testing (PIXIT) for IEC 61850 client interface in CSI-200E-ER, V1.00".

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):

1a	Basic Exchange (26/31)
_	

- 2 Data Sets (10/10)
- 2+ Data Set Definition (8/8)
- 3 Substitution (3/3)
- 4 Setting Group Selection (4/4)
- 4+ Setting Group Definition (5/5)
- 5 Unbuffered Reporting (34/34)
- Buffered Reporting (31/31)Logging (12/13)

12a Direct Control (7/9)

12b SBO Control (10/12)

12c Enhanced Direct Control (7/9)

12d Enhanced SBO Control (9/11)

13a Time Synchronization SNTP (3/4)

14 File Transfer (9/9)

15 Service Tracking (16/16)

This certificate includes a summary of the test results as carried out at Beijing Sifang Automation Co., Ltd. in China with UniGrid SA for Client Testing 3.0.1 with test suite 18102024 and UniCA 61850 Analyzer 6.45.03. This document has been issued for information purposes only, and the archived DNV verification report No. 10520823-DSO 24-4314 rev 2 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV by Beijing Sifang Automation Co., Ltd. The manufacturer's production process has not been assessed. This certificate does not imply that DNV has approved any product other than the specimen tested.

Arnhem, October 22, 2024

Xie, Xing Xing Vicky Test Engineer Issued by:

DNV

R Schimmel Verification Manager

Copyright © DNV Netherlands B.V. Arnhem, the Netherlands. All rights reserved. It is prohibited to update or change this certificate in any manner whatsoever, including but not limited to dividing it into parts.

<sup>&</sup>lt;sup>1</sup> Level A - Independent test lab with certified ISO 9001 Quality System





## **IEC 61850 Certificate Level A**

Applicable Test Procedures from the UCA International Users Group Edition 2 with Amendment 1 Client Conformance Test Procedures version 1.0

Conformance Block		Mandatory	Conditional
1a:	Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6, cAssN8	cAssN7, cSrv1, cSrv2, cSrv3, cSrv4, cSrv5, cSrv6, cSrv7, cSrv9, cSrv10, cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6, cSrvN7, cSrvN8, cSrvN9
2:	Data Sets		cDs1, cDs2, cDs3, cDs4, cDs5, cDs6 cDsN1a, cDsN1b, cDsN1c, cDsN2
2+:	Data Set Definition		cDs10, cDs11, cDs12, cDs13, cDs14, cDsN10a, CdsN10b, cDsN11
3:	Substitution	cSub1, cSub3	cSub2
4:	Setting Group Selection	cSg2, cSg46, cSgN1	cSg1
4+:	Setting Group Definition	cSg11, cSg14	cSg10, cSg12, cSg13
5:	Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp18, cRp19, cRp20, cRp21, cRp22, cRp40, cRp41, cRp42, cRp43, cRp44, cRp45, cRp46, cRpN2, cRpN5, cRpN6	cRp1, cRp2, cRp6, cRp7, cRp12, cRp13b, cRp16, cRp17, cRpN1
6:	Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr18, cBr19, cBr20, cBr21, cBr22, cBr30, cBr31, cBr46, cBrN2, cBrN5, cBrN6	cBr1, cBr2, cBr6, cBr7, cBr12, cBr13b, cBr16, cBr17, cBr32, cBrN1
7:	Logging	cLog4, cLog6, cLog7, cLog8, cLog46, cLogN3, cLogN4	cLog1, cLog2, cLog5, cLogN1, cLogN2
12a:	Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2, cCtl3
12b:	SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3, cSBOns10	cCtl1, cCtl2, cCtl3, cSBOns4
12c:	Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl1, cCtl2, cCtl3
12d:	Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2, cCtl3, cSBOes4
13a:	Time sync SNTP	cTm1, cTmN1	cTm2
14:	File transfer	cFt1, cFt3, cFt6, cFtN1	cFt2, cFt4, cFt5, cFtN2, cFtN3
15:	Service Tracking		cTrk1, cTrk2, cTrk3, cTrk4, cTrk5, cTrk6, cTrk7, cTrk8, cTrk9, cTrk10, cTrk11, cTrk12, cTrk13, cTrk14, cTrk15, cTrk16

Test case	Comments
cSrvN10	Deprecated according to Redmine #6688
cLogN5	Deprecated according to Redmine #6902
cDsN1bc	Performed according to Redmine #6727
cSBOns4	Performed according to Redmine #6776
cFtN3	Performed according to Redmine #7029