IEC 61850 Certificate Level A[1]

No. 10017938-OPE/INC 16-1956

Issued to:

Beijing Sifang Automation Co., Ltd.
No.9, Fourth Street,
Shangdi Information Industry Base
Haidian District
BEIJING 100085
CHINA

For the client system:

CSC-2000(V2)
Substation Automation System
HMI Software Version: 3.42
Client Module CSS 61850 version: V3.57.41
PC Hardware Version: Lenovo Thinkpad T440p
with Windows 7 professional 32 bit

The client system 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 Client Conformance Test Procedures version 1.0 with TPCL[2] 1.0 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in "CSC-2000(V2)", version 1.0", "Model Implementation Conformance Statement for the IEC 61850 interface in "CSC-2000(V2)", version 1.0" and "TISSUES Implementation Conformance Statement for the IEC 61850 Edition 2 Client Interface in "CSC-2000(V2)", version 1.0" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client Interface in "CSC-2000(V2)", version 1.0".

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 (21/24)	9	GOOSE Control Block (2/2)
2	Data Sets (7/10)	12a	Direct Control (7/9)
2+	Data Set Definition (8/8)	12b	SBO Control (9/11)
3	Substitution (3/3)	12c	Enhanced Direct Control (7/9)
4	Setting Group Selection (3/3)	12d	Enhanced SBO Control (9/11)
4+	Setting Group Definition (5/5)	13	Time Synchronization (3/4)
5	Unbuffered Reporting (21/23)	14	File Transfer (8/8)
6	Buffered Reporting (26/28)	15	Service Tracking (6/17)

This certificate includes a summary of the test results as carried out at DNV GL in The Netherlands with UniCA 61850 IED simulator 5.31.00 and UniCA 61850 Analyzer 5.31.00. This document has been issued for information purposes only, and the original paper copy of the DNV GL verification report No. 10017938-OPE/INC 16-1955 will prevail.

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

Arnhem, June 14, 2016

P. Cioci
Global Service Line Leader
Operational Excellence of Power
Systems

Issued by:

DNV·GL
DNV KEMA is now DNV GL

R. Schimmel
Verification Manager

[1] Level A - Independent test lab with certified ISO 9001 Quality System
[2] TPCL - Test procedures change list

this certificate in any manner whatsoever, including but not limited to dividing it into parts.

IEC 61850 Certificate Level A   No. 10017938-OPE/INC 16-1956

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

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7, cSrv1, cSrv2, cSrv3, cSrv5, cSrv6, cSrv7, cSrv9, cSrv10, cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6
2: Data Sets		cDs1, cDs2, cDs5, cDs6, cDsN1a, cDsN1b, cDsN1c
2+: Data Set Definition		cDs10, cDs11, cDs12, cDs13, cDs14, cDsN10a, cDsN10b, cDsN11
3: Substitution	cSub1, cSub3	cSub2
4: Setting Group	cSg2, cSgN1	cSg1
4+: Setting Group Definition	cSg11, cSg14	cSg10, cSg12, cSg13
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRpN2, cRpN5, cRpN6	cRp1, cRp2, cRp6, cRp7, cRp16, cRp17, cRp18, cRpN1
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr30, cBr31, cBrN2, cBrN5, cBrN6, cBrN20	cBr1, cBr2, cBr6, cBr7, cBr16, cBr17, cBr18, cBr32, cBr33, cBrN1
9: GOOSE Control Block	cGcb1	cGcb2
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2, cCtl3
12b: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3	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
13: Time Synchronization	cTm1, cTmN1	cTm2
14: File Transfer	cFt1, cFt3, cFtN1	cFt2, cFt4, cFt5, cFtN2, cFtN3
15: Service Tracking		cTrk1, cTrk2, cTrk3, cTrk4, cTrk7, cTrk8