IEC 61850 Certificate

Level A[1]

No. D 002427 0005 Rev. 00

Issued to:

**GUODIAN NANJING AUTOMATION CO., LTD.
NANJING SAC POWER GRID AUTOMATION
CO., LTD.
No.39, Shuige Road, Jiangning Development
Zone, 211153, Nanjing, China**

For the server product:

**SG B750 Digital Busbar Protection
Software Version: 5.02.02.10h2**

Issued by:
TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD
SHANGHAI BRANCH
Communication Protocols
No.16 Lane 1951 Duhui Road
Shanghai, 201 108,
People's Republic of China

The server product has not been shown to be non-conforming to:
IEC 61850 First Edition 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, the UCA International Users Group Server Device Test Procedures version 3.3, the product's protocol, model and technical issue implementation conformance statements: "SG B750_PICS_Server_Ed1_V1.0", "SG B750_MICS_Server_Ed1_V1.0", "SG B750_TICS_Server_Ed1_V1.0" and the extra information for testing: "SG B750_PIXIT_Server_Ed1_V1.0".

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 (24/25)	9a	GOOSE Publish (9/12)
2	Data Sets (3/6)	9b	GOOSE Subscribe (10/11)
3	Substitution (4/4)	12a	Direct Control (4/11)
4	Setting Group Selection (3/3)	12d	Enhanced SBO Control (11/19)
4+	Setting Group Definition (7/7)	13	Time Synchronization (4/5)
5	Unbuffered Reporting (16/18)	14	File Transfer (4/7)
6	Buffered Reporting (23/27)		

This Certificate includes a summary of the test results as carried out at TÜV SÜD Certification and Testing (China) Co., Ltd Shanghai Branch in P.R. China with SimFlex CS Ed.1 version 5.0 with test suite 5.0 and Wireshark version 3.0.0. This document has been issued for information purposes only, and the original paper copy of the TÜV SÜD report: No. 705202007601-00, version 1.0 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to TÜV SÜD by GUODIAN NANJING AUTOMATION CO., LTD. NANJING SAC POWER GRID AUTOMATION CO., LTD.. The manufacturer's production process has not been assessed. This certificate does not imply that TÜV SÜD has approved any product other than the specimen tested.

Shanghai, May 26, 2020

Cong WANG

Cong Wang
Technical Certifier

Yifan WANG

Yifan Wang
Test Engineer

[1] Level A - Independent Test lab with certified ISO/IEC 17025 Quality System

According to the "TÜV SÜD Group Certification Rules" please see reverse side.

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Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 3.3

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5	AssN3, AssN6
	Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, Srv9, Srv10, Srv12, SrvN1e, SrvN1f, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
3: Substitution	Sub1, Sub2, Sub3, SubN1	
4: Setting Group Selection	Sg1, SgN1a, Sg3	
4+: Setting Group Definition	Sg2, Sg4, SgN1b, SgN2, SgN3, SgN4, SgN5	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp9, RpN1, RpN2, RpN3, RpN4, RpN8	Rp5, Rp8, Rp10, Rp11, Rp12, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br9, Br20, Br21, Br22, Br25, Br26, Br27, Br28	Br5, Br8, Br10, Br11, Br12
	BrN1, BrN2, BrN3, BrN4, BrN5, BrN8	
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop9, Gop10a	Gop1, Gop5, Gop7, GopN2
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtlN3, DOns1	CtlN11, DOns3
12d: Enhanced SBO control	CtlN1, CtlN2, CtlN3, CtlN4, CtlN9	Ctl3, CtlN6, CtlN11
	SBOes1, SBOes2, SBOes3	
13: Time sync	Tm1, Tm2	Tm3, TmN1
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	

According to the "TÜV SÜD Group Certification Rules" please see reverse side.

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