



IEC 61850 Certificate Level A¹

No. 30920409-Consulting 09-1648

Issued to:
Nanjing Sino-German Protection & Substation Control Systems Ltd.
Building D11, Nanjing New & High Technology Industry Development Zone
Nanjing 210061, P.R.China

For the product:
NZD68 Bay Control Unit
Firmware version V3.12

Issued by:



The product has not shown to be non-conforming to:
IEC 61850-6, 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 with product's protocol, model and technical issue implementation conformance statements: "NZD68_Conformance_Statement", "NZD68_TICS", and product's extra information for testing: "NZD68_PIXIT".

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 as defined in the UCA International Users Group Device Test procedures v2.2):

1 Basic Exchange (20/24)	9a GOOSE Publish (8/12)
2 Data Sets (3/6)	9b GOOSE Subscribe (9/10)
3 Substitution (4/4)	12d Enhanced SBO Control (11/19)
5 Unbuffered Reporting (14/18)	13 Time Synchronization (3/5)
6 Buffered Reporting (16/20)	14 File Transfer (6/7)

This Certificate includes a summary of the test results as carried out at Nanjing Sino-German Protection & Substation Control Systems Ltd. in China with UniCASim 61850 version 3.19.00 with test suite 3.19.00 and UniCA 61850 analyzer 4.18.01. The test is based on the UCA International Users Group Device Test Procedures version 2.2. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30920409-Consulting 09-1647 will prevail.

The test has been carried out on one single specimen of the products as referred above and submitted to KEMA by Nanjing Sino-German Protection & Substation Control Systems Ltd.. The manufacturer's production process has not been assessed. This Certificate does not imply that KEMA has certified or approved any product other than the specimen tested.

Arnhem, July 10, 2009

W. Strabbing
Manager Intelligent Networks and Communication

T. Xu
Test Engineer

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System

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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, SrvN2, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
3: Substitution	Sub1, Sub2, Sub3, SubN1	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10 RpN1, RpN2, RpN3, RpN4	Rp8, Rp9, RpN5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12 BrN1, BrN2, BrN3, BrN4, BrN5	Br10, Br11, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop5, Gop6, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12d: Enhanced SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3	Ctl7, CtlN11
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, FtN1ab, Ft4	Ft2c, FtN1c