IEC 61850 Certificate Level A[1]

International Usersgroup

No. 30920511-Consulting 10-0911

Issued to:
Remsdaq Ltd.
Parkway, Deeside Industrial Park
Deeside, Flintshire
CH5 2NL, United Kingdom

For the product:
Callisto^{nx} Base Unit
IEC61850 Server v1.3.10

Issued by: **KEMA**

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 and product's extra information for testing: "Callisto^{nx} Implementation Conformance for IEC61850 Interface USR00410".

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 (6/12)
2	Data Set Definition (3/6)	12a	Direct Control (5/11)
2+	Data Set Definition (23/23)	12b	SBO Control (7/15)
5	Unbuffered Reporting (15/18)	12c	Enhanced Direct Control (5/13)
6	Buffered Reporting (17/20)	12d	Enhanced SBO Control (10/19)

This Certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCAsim 61850 version 3.20.00 with test suite version 3.20.00 and UniCA 61850 Analyzer version 4.21.02. 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. 30920511-Consulting 10-0910 will prevail.

The test has been carried out on one single specimen of the products as referred above and submitted to KEMA by Remsdaq 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, April 21, 2010

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

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	
2+: Data Set Definition	Dset2, Dset3, Dset4, Dset5, Dset6, Dset7, Dset8, Dset9 DsetN1cd, DsetN2, DsetN3, DsetN4, DsetN5, DsetN6, DsetN7, DsetN8, DsetN9, DsetN10, DsetN11, DsetN12, DsetN13, DsetN14, DsetN15	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10 RpN1, RpN2, RpN3, RpN4	Rp5, Rp6, Rp8, Rp9, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br6, Br10, Br11
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, GopN1
12a: Direct control	CltN3, CtlN8 DOns1, DOns3	CtlN11
12b: SBO control	Ctl3, CltN1, CltN2, CltN3, CltN4 SBOns2	CtlN11
12c: Enhanced Direct Control	CltN3, CtlN8 DOes2, DOes5	CtlN11
12d: Enhanced SBO control	Ctl3, CltN1, CltN2, CltN3, CltN4, CltN9 SBOes1, SBOes2, SBOes3	CtlN11