IEC 61850 Certificate Level A[1]

No. 74102448-MOC/INC 13-1397

Issued to:
Elipse Software, Ltda
Rua 24 de Outubro
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90510-002 Porto Alegre
RS - Brasil

For the client system:
Elipse Power with IEC 61850 Driver
version 2.00.03
Hardware: Dell Latitude D6500 with
Windows 7 Professional

Issued by: **KEMA**

The client system has not 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 and UCA IUG Conformance Test Procedures for Client System with IEC 61850-8-1 interface, revision 1.1 with TPCL[2] version 1.2 with client system's protocol, model and technical issue implementation conformance statements: "IEC 61850 Client Driver Protocol Implementation Conformance Statement – PICS, version 1.01", "IEC 61850 Client Driver Model Implementation Conformance Statement – MICS, version 1.00", "IEC 61850 Client Driver Tissues Implementation Conformance Statement – TICS, version 1.00" and product's extra information for testing: "IEC 61850 Client System Protocol Implementation Conformance Extra Information – PIXIT, version 1.02".

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 (22/22)	12a	Direct Control (7/7)
2	Data Sets (7/9)	12b	SBO Control (9/9)
2+	Data Set Definition (4/4)	12c	Enhanced Direct Control (7/7)
5	Unbuffered Reporting (16/18)	12d	Enhanced SBO Control (9/9)
6	Buffered Reporting (20/22)	13	Time Synchronization (2/4)
		14	File Transfer (6/8)

This certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCA Multi IED Simulator version 3.26.1 and UniCA 61850 Analyzer version 5.26.03. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74102448-MOC/INC 13-1398 will prevail.

The test has been carried out on one single specimen of the client system as referred above and submitted to KEMA by Elipse Software. The manufacturer's production process has not been assessed. This attestation does not imply that KEMA has approved any product other than the specimen tested.

Arnhem, March 15, 2013

M. Adriaensen
Director Intelligent Networks & Communication

R. Schimmel
Certification Manager

[1] Level A - Independent test lab with certified ISO 9001 quality system
[2] TPCL - Test Procedure Change List

Applicable Test Procedures from the UCA IUG Conformance Test Procedures for Client System with IEC 61850-8-1 interface, revision 1.1 with TPCL version 1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAss4, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7 cSrv1, cSrv2, cSrv3, cSrv4, cSrv5, cSrv6, cSrv7, cSrvN1, cSrvN2, cSrvN3, cSrvN4, cSrvN5, cSrvN6
2: Data Sets		cDs1, cDs2, cDs3, cDs5, cDsN1a, cDsN1b, cDsN2
2+: Data Set Definition	cDs6, cDsN4	cDs7, cDsN5
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRpN2, cRpN3, cRpN7, cRpN8	cRp1, cRp2, cRp6, cRp7, cRpN1, cRpN4
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr12, cBrN2, cBrN3, cBrN7, cBrN8, cBrN9	cBr1, cBr2, cBr6, cBr7, cBr13, cBrN1, cBrN4
12a: Direct control	cCtl4, cCtlN1 cDOns1, cDOns2	cCtl1, cCtl2, cCtl3
12b: SBO control	cCtl4, cCtlN1 cSBOns1, cSBOns2, cSBOns3	cCtl1, cCtl2, cCtl3, cSBOns4
12c: Enhanced Direct Control	cCtl4, cCtlN1 cDOes1, cDOes2	cCtl1, cCtl2, cCtl3
12d: Enhanced SBO control	cCtl4, cCtlN1, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2, cCtl3 cSBOes4
13: Time sync	cTm1	cTm2
14: File transfer	cFt1, cFt2, cFt3, cFtN1, cFtN2	cFt5