



# IEC 61850 Certificate Level A<sup>1</sup>

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No. 74100543-Consulting 11-1720

Issued to:  
Protecta Electronics Co Ltd.  
H-1158 Budapest  
Késmárk u. 7/A  
Hungary

For the client system:  
EuroGateway  
firmware version: 1.2  
hardware version: 1.3



The client system 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 client system's protocol, model and technical issue implementation conformance statements: "EuroGateway – PICS ver. 1.1", "EuroGateway – MICS ver. 1.0", "EuroGateway – TICS ver. 1.0" and product's extra information for testing: "EuroGateway – PIXIT ver. 1.1".

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 IUG Client Test procedures version 1.1):

1 Basic Exchange (14/22)	12a Direct Control (5/7)
2 Data Sets (4/8)	12b SBO Control (6/9)
5 Unbuffered Reporting (15/18)	12c Enhanced Direct Control (5/7)
6 Buffered Reporting (18/22)	12d Enhanced SBO Control (6/9)
	13 Time Synchronization (4/4)

This Certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCA Multi IED simulator v2.00.02 and UniCA 61850 analyzer v4.23.02. The test is based on the UCA IUG "Conformance Test Procedures for Client System with IEC 61850-8-1 interface, version 1.1". This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74100543-Consulting 11-1719 will prevail.

The test has been carried out on one single specimen of the client system as referred above and submitted to KEMA by Protecta Co 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 8, 2011

M. Adriaansen  
Manager Intelligent Networks and Communication

R.S. Massink  
Technical Professional

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 IUG “Conformance Test Procedures for Client System with IEC 61850-8-1 interface, version 1.1”

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAss4, cAssN1, cAssN4, cAssN5, cAssN6 cSrv5, cSrvN3	cAssN7 cSrv1, cSrv2, cSrv3
2: Data Sets	cDs1, cDs2, cDs5, cDsN1	
5: Unbuffered Reporting	cRp2, cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRpN2, cRpN3, cRpN7, cRpN8	cRp1, cRp7, cRpN1, cRpN4
6: Buffered Reporting	cBr2, cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr12, cBrN2, cBrN3, cBrN7, cBrN8, cBrN9	cBr1, cBr7, cBrN1, cBrN4
12a: Direct control	cCtl4, cCtlN1 cDOns1, cDOns2	cCtl2
12b: SBO control	cCtl4, cCtlN1 cSBOns1, cSBOns2, cSBOns3	cCtl2
12c: Enhanced Direct Control	cCtl4, cCtlN1 cDOes1, cDOes2	cCtl2
12d: Enhanced SBO control	cCtl4, cCtlN1, cSBOes1, cSBOes2, cSBOes3	cCtl2
13: Time sync	cTm1	cTm2, cTmN1, cTmN2