IEC 61850 Certificate Level A[1]

No. 10117899-INC 18-3005

Issued to:

EXIMPROD GRUP SA
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Buzău 120038
Romania

For the client system:

ES200 Supervision, Control and Communication RTU Gateway
Software version: 2.6
Hardware version: Cisco IR809G with Cisco IOx
S/N: FCW211500KF

The client system 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 and UCAIug 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: "Protocol Implementation Conformance Statement for the IEC 61850 interface in <ES200>, dated October 18, 2018", "Model Implementation Conformance Statement for the IEC 61850 Client Interface in ES200, dated October 18, 2018" and "TISSUES Implementation Conformance Statement for the IEC 61850 interface in <ES200>, dated October 18, 2018" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client interface in ES200 CISCO IR809, dated October 18, 2018".
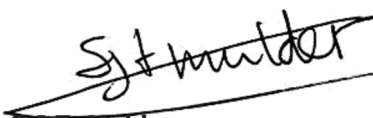
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

1	Basic Exchange (18/22)	12a	Direct Control (4/7)
2	Data Sets (5/9)	12b	SBO Control (5/9)
5	Unbuffered Reporting (15/18)	12c	Enhanced Direct Control (4/7)
6	Buffered Reporting (19/22)	12d	Enhanced SBO Control (5/9)
		13	Time Synchronization (3/4)

This certificate includes a summary of the test results as carried out at DNV GL in the Netherlands with UniCA IED Simulator version 6.1.31 and UniCA 61850 Analyzer version 5.34.20. This document has been issued for information purposes only, and the archived DNV GL report No. 10117899-INC 18-3004 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by EXIMPROD GRUP. The manufacturer's production process has not been assessed. This certificate does not imply that DNV GL has approved any product other than the specimen tested.

Arnhem, October 18, 2018

S.J.T. Mulder
Business Leader
Interoperability of smart power systems

Issued by:

DNV·GL

DNV KEMA is now DNV GL

R. Schimmel
Verification Manager

[1] Level A - Independent test lab with certified ISO 9001 Quality System
[2] TPCL - Test procedures change list

Applicable Test Procedures from the UCAIug 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, cSrvN1, cSrvN3, cSrvN5, cSrvN6
2: Data Sets		cDs1, cDs2, cDs5, cDsN1a, cDsN1b
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRpN2, cRpN3, cRpN7, cRpN8	cRp1, cRp2, cRp7, cRpN1, cRpN4
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr12, cBrN2, cBrN3, cBrN7, cBrN8, cBrN9	cBr1, cBr2, cBr7, cBr13, cBrN1, cBrN4
12a: Direct Control	cCtl4, cCtlN1, cDOns1, cDOns2	
12b: SBO Control	cCtl4, cCtlN1, cSBOns1, cSBOns2, cSBOns3	
12c: Enhanced Direct Control	cCtl4, cCtlN1, cDOes1, cDOes2	
12d: Enhanced SBO Control	cCtl4, cCtlN1, cSBOes1, cSBOes2, cSBOes3	
13: Time sync	cTm1	cTm2, cTmN1