

No. 10029776-OPE/INC 17-2310

Issued to:

CG Automation Limited
Burton Chambers
19-22 Dame St
Dublin 2
Ireland

For the server product:

XCell RTU
Remote Telemetry Unit
Software version: 61850SNB v3.01
Hardware version: CPR-041 MP10
Serial No.: C081449436

The server product has not been shown to be non-conforming to:

IEC 61850 Edition 2 Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems for power utility automation

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL² 1.2.3 with product's protocol, model and technical issue implementation conformance statements: "XCell v3.01 IEC 61850 PICS v1.0", "XCell v3.01 IEC 61850 MICS v1.0" and "Tissues Implementation Conformance Statement for the IEC 61850 Edition 2 Server interface in XCell v3.01 rev 1.0" and product's extra information for testing: "XCell v3.01 IEC 61850 PIXIT v1.0".


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 (19/26)	12a	Direct Control (6/18)
2	Data Sets (4/7)	12b	SBO Control (12/27)
5	Unbuffered Reporting (18/21)	12c	Enhanced Direct Control (7/20)
6	Buffered Reporting (25/30)	12d	Enhanced SBO Control (11/28)
9a	GOOSE Publish (11/13)	13	Time Synchronization (3/7)
9b	GOOSE Subscribe (12/14)		

This certificate includes a summary of the test results as carried out at CG Automation Limited in Ireland with UniCA 61850 Client Simulator 4.29.03 with test suite Ed2 4.32.02 and UniCA 61850 Analyzer 5.31.00. This document has been issued for information purposes only, and the original paper copy of the DNV GL verification report No. 10029776-OPE/INC 17-2308 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by CG Automation Limited. 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, June 13, 2017



P. Cioci
Business Director
Intelligent networks and communication

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 UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL 1.2.3

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sSrv6, sSrv8, sSrvN1e, sSrvN1f, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr15, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr8, sBr10, sBr11, sBr12
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11	sGop1, sGop6, sGop7, sGopN1, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl13, sCtl16
12b: SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl6, sCtl16, sCtl27
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl13, sCtl14, sCtl16
12d: Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl16
13: Time sync	sTm1, sTm2, sTmN1	