

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

No. 10032235-INC 17-1802

## Issued to:

GE Grid Solutions Parc Eurêka 81, rue Euclide – CS 11140 34060 Montpellier cedex 2 France

## For the client system:

DS Agile C264 Modular Substation / Bay Controller Software version: DS Agile V7 Hardware version: CPUv4 S/N: 3388208

The client system 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 Client Conformance Test Procedures version 1.0 with TPCL<sup>2</sup> 1.0.1 with product's protocol, model and technical issue implementation conformance statements: "PICS for DS Agile C264 V7 Rev A1.3", "MICS for Client DS Agile C264 V7 Rev A1.1" and "TICS for DS Agile C264 V7 Rev A1.2" and the extra information for testing: "PIXIT for Client DS Agile C264 V7 Rev A1.2".

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 (11/24)
- 2 Data Sets (4/10)
- 5 Unbuffered Reporting (19/23)
- 6 Buffered Reporting (24/28)

9 GOOSE Control Block (1/2)
12a Direct Control (6/9)
12c Enhanced Direct Control (6/9)
12d Enhanced SBO Control (8/11)
13 Time Synchronization (3/4)

This certificate includes a summary of the test results as carried out at GE Grid Solutions in France with UniCA 61850 IED simulator 5.29.06 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 report No. 10032235-INC 17-1801 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by GE Grid Solutions. 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 28, 2017

**P. Gioci** Business Director Intelligent Networks and Communication

Issued by:

DNV KEMA is now DNV GL

rification Manager

 $^{\rm 1}$  Level A - Independent test lab with certified ISO 9001 Quality System  $^{\rm 2}$  TPCL - Test procedures change list

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Applicable Test Procedures from the UCA International Users Group Edition 2 Client Conformance Test Procedures version 1.0 with TPCL 1.0.1

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7, cSrv10, cSrvN5, cSrvN6
2: Data Sets		cDs2, cDs5, cDs6, cDsN1b
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRpN2, cRpN5, cRpN6	cRp2, cRp6, cRp7, cRp16, cRp17, cRp18
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr30, cBr31, cBrN2, cBrN5, cBrN6, cBrN20	cBr2, cBr6, cBr7, cBr16, cBr17, cBr18, cBr32, cBr33
9: GOOSE Control Block	cGcb1	
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl1, cCtl2
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2, cSBOes4
13: Time Synchronization	cTm1, cTmN1	cTm2