

No. 10021185-OPE/INC 16-2085

**Issued to:**

Schneider Electric  
Avenue de Figuières  
34975 Lattes  
France

**For the client system:**

GTW  
Gateway Software for PACiS Solution  
Software version: PACIS V6\_1.402.100.100 12  
Hardware version: Advantech UNO-4683

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: "Gateway (GTW) Protocol Implementation Conformance Statement for the IEC 61850 interface, version A", "Gateway (GTW) Model Implementation Conformance Statement for the IEC 61850 Client Interface, version A" and "Gateway (GTW) TISSUES Implementation Conformance Statement for the IEC 61850 Edition 2 Client Interface, version A" and the extra information for testing: "Gateway (GTW) Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client Interface, version A".

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 (11/25)	12a Direct Control (5/9)
2 Data Sets (4/10)	12c Enhanced Direct Control (5/9)
5 Unbuffered Reporting (17/23)	12d Enhanced SBO Control (7/11)
6 Buffered Reporting (20/28)	13 Time Synchronization (4/4)

This certificate includes a summary of the test results as carried out at Schneider Electric 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 verification report No. 10021185-OPE/INC 16-2084 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by Schneider Electric. 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 3, 2016



**P. Cioci**  
Global Service Line Leader  
Operational Excellence of Power  
Systems

Issued by:




**R. Schimmel**  
Verification Manager

<sup>1</sup> Level A - Independent test lab with certified ISO 9001 Quality System

<sup>2</sup> 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, cRp7, cRp16, cRp18
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr30, cBr31, cBrN2, cBrN5, cBrN6, cBrN20	cBr2, cBr7, cBr16, cBr18
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl2
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl2
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl2, cSBOes4
13: Time Synchronization	cTm1, cTmN1	cTm2, cTmN2