

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

No. 2015PUCA0003

Issued to: Schneider Electric 8eme rue, ZI de Carros, FRANCE



For the product: 140 NOP 850 00 Communication Module Software <sup>2</sup> Version: V1.0

## The server product 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, the UCA International Users Group Device Test Procedures version 2.3 with test procedures change list version 1.7.7, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement (PICS) for 140 NOP 850 00 Communication Module Software ", " Modeling Implementation Conformance Statement(MICS) for 140 NOP 850 00 Communication Module Software ", " Technical Issues Conformance Statement (TICS) for 140 NOP 850 00 Communication Module Software ", " Protocol Implementation extra information (PIXIT) of the IEC 61850 communication interface in 140 NOP 850 00 Communication Module Software".

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):

<ol> <li>Basic Exchange (22/24)</li> <li>Data Sets (3/6)</li> <li>Unbuffered Reports (16/18)</li> <li>Buffered Reporting (18/19)</li> <li>GOOSE publish(12/12)</li> </ol>	9bGOOSE subscribe(11/11)12aDirect control(7/11)12bSBO control(11/14)13Time sync(3/5)
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This Certificate includes a summary of the test results as carried out at the KETOP Lab's offices in Xuchang, China with UniCAsim 61850 Client Version 4.26.04 with test suite Version 3.26.00 and the UniCA 61850 analyzer Version 5.27.07. This document has been issued for information only, and the original paper copy of the KETOP Lab report: No. JW141458 will prevail.

The test have been carried out on one single specimen of the product as referred above and submitted to KETOP Lab by Schneider Electric (China) Co., Itd Shanghai Branch. The manufacturer's production process has not been assessed. This certificate does not imply that KETOP Lab has approved any product other than the specimen tested.

Xuchang, Jun 23th, 2015

He Chun

Director of PRTC Department

Yin Qingwei Test Engineer

<sup>1</sup> Level A - Independent Test lab with ISO 17025 Quality System <sup>2</sup> The product is 140 NOP 850 00 Communication Module Software for Quantum PLC

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Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 2.3 with TPCL version 1.7.7

<b>Conformance Block</b>	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, Srv6, Srv7, Srv8, Srv9, Srv10, SrvN1e, SrvN1f, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, RpN1, RpN2, RpN3, RpN4	Rp5, Rp6, Rp7, Rp8, Rp9, Rp10, Rp12, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br8, Br9, BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br6, Br7, Br10, Br11, Br12, Br14
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a	Gop1, Gop5, Gop6, Gop10b , GopN1, GopN2,
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b, Gos4
12a Direct control	CtlN3, DOns1	Ctl4, DOns2, DOns3, DOns4, DOns5
12b SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4 SBOns2	Ctl4, SBOns3, SBOns4, SBOns5
13 Time sync	Tm1, Tm2	TmN1

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