

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

No. 10015295-OPE/INC 16-2652

Issued to:

Schneider Electric - VAMP Oy Yrittäjänkatu 15 65101 – Vaasa Finland For the server product:

VAMP 57 Feeder Manager Software version: V20.107

Hardware version: V57F-3AAA1BCA

S/N: 003722

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 TPCL<sup>2</sup> 1.2 with product's protocol, model and technical issue implementation conformance statements: "VAMP protection relays with embedded IEC 61850 Ed. 2 Server Conformance Statement for VAMP 57, Version: 0.0.6" and the extra information for testing: "VAMP protection relays with embedded IEC 61850 Ed. 2 Server Conformance Statement for VAMP 57, Version: 0.0.6".

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 (17/26)
- 2 Data Sets (3/7)
- 2+ Data Set Definition (24/24)
- 5 Unbuffered Reporting (21/21)
- 6 Buffered Reporting (30/30)

- 9a GOOSE Publish (10/13)
- 9b GOOSE Subscribe (12/14)
- 12a Direct Control (5/18)
- 12b SBO Control (10/27)
- 12c Enhanced Direct Control (6/20)
- 12d Enhanced SBO Control (11/28)
- 13 Time Synchronization (4/7)
- 14 File Transfer (7/8)

This certificate includes a summary of the test results as carried out at INFO TECH sp.j. in Poland with UniCA 61850 Client Simulator 4.32.01 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. 10015295-OPE/INC 16-2654 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, December 9, 2016

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Global Service Line Leader Operational Excellence of Power Systems Issued by:



DNV KEMA is now DNV GL

R. Schimmel
Verification Manager

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

<sup>&</sup>lt;sup>2</sup> 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

Conformance Block		Mandatory	Conditional
1:	Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sSrv6, sSrvN1e, sSrvN3
2:	Data Sets	sDs1, sDs10a, sDsN1ae	
2+:	Data Set Definition	sDs2, sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs9, sDs11, sDs13, sDs14, sDsN1cd, sDsN2, sDsN3, sDsN4, sDsN5, sDsN6, sDsN7, sDsN8, sDsN9, sDsN10	sDs12, sDsN11, sDsN12
5:	Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRp13, 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	sBr6, sBr7, sBr8, sBr10, sBr11, sBr12, sBr13, sBr23, sBr24
9a:	GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11	sGop1, sGop6, sGop7, sGopN1
9b:	GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	
12a:	Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl16
12b:	SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl16
12c:	Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl14, sCtl16
12d:	Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl16
13:	Time sync	sTm1, sTm2, sTmN1	sTm3
14:	File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFtN1c