

No. 74105631-OPE/INC 14-3405

Issued to:

Siemens AG
Energy Management
Humboldtstr. 59
90459 Nuremberg
Germany

For the client system:

SICAM PAS/PQS
Software version: 8.03
Hardware: Dell Latitude E6340 with Windows 7

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 TPCL² 1.0 with product's protocol, model and technical issue implementation conformance statements: "SICAM PAS/PQS IEC 61850 Client V8.03 PICS, E50417-T8976-C444-A3", "SICAM PAS/PQS IEC 61850 Client V8.03 MICS, E50417-T8976-C443-A3" and "SICAM PAS/PQS IEC 61850 Client V8.03 TICS, E50417-T8976-C442-A3" and the extra information for testing: "SICAM PAS/PQS IEC 61850 Client V8.03 PIXIT, E50417-T8976-C445-A3".

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 (20/24)	12a Direct Control (5/9)
2 Data Sets (6/10)	12b SBO Control (7/11)
2+ Data Set Definition (8/8)	12c Enhanced Direct Control (5/9)
4 Setting Group Selection (3/3)	12d Enhanced SBO Control (7/11)
5 Unbuffered Reporting (22/23)	13 Time Synchronization (3/4)
6 Buffered Reporting (27/28)	14 File Transfer (3/8)

This certificate includes a summary of the test results as carried out at DNV GL in the Netherlands with UniCA 61850 IED simulator 5.29.04 and UniCA 61850 Analyzer 5.29.02. This document has been issued for information purposes only, and the original paper copy of the DNV GL report No. 74105631-OPE/INC 14-3404 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by Siemens. 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, April 15, 2015



M. Adriaensen
Head of Department
Operational Excellence

Issued by:



DNV GL

DNV KEMA is now DNV GL



R. Schimmel
Certification Manager

¹ Level A - Independent test lab with certified ISO 9001 Quality System

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

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cSrv1, cSrv2, cSrv3, cSrv4, cSrv5, cSrv6, cSrv7, cSrv10, cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6
2: Data Sets		cDs1, cDs2, cDs5, cDs6, cDsN1a, cDsN1b
2+: Data Set Definition		cDs10, cDs11, cDs12, cDs13, cDs14, cDsN10a, cDsN10b, cDsN11
4: Setting Group	cSg2, cSgN1	cSg1
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRpN2, cRpN5, cRpN6	cRp1, cRp2, cRp6, cRp7, cRp12, cRp13b, cRp16, cRp18, cRpN1
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr30, cBr31, cBrN2, cBrN5, cBrN6, cBrN20	cBr1, cBr2, cBr6, cBr7, cBr12, cBr13b, cBr16, cBr18, cBr32, cBr33, cBrN1
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl2
12b: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3	cCtl2, cSBOns4
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
14: File Transfer	cFt1, cFt3, cFtN1	