

IEC 61850 Certificate Level A¹

No. 10018078-OPE/INC 16-2040

Issued to:

Siemens AG
PD PA EA R&D-E
Siemensallee 84
76187 Karlsruhe
Germany

For the client system:

SPPA-T3000 Control System
Release 7.2
Software version: 07.2.11.11

Communication server CS3000
SN/HW revision: 30914/A
Software version: cs_6.0_020

The client system 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 and UCAIug Conformance Test Procedures for Client System with IEC 61850-8-1 interface, revision 1.1 with TPCL² version 1.2.3 with client system's protocol, model and technical issue implementation conformance statements: "IEC61850 Client PICS for SPPA-T3000, version 1.01", "IEC61850 Client MICS for SPPA-T3000, version 1.01" and "IEC61850 Client TICS for SPPA-T3000, version 1.00" and product's extra information for testing: "IEC61850 Client PIXIT for SPPA-T3000, version 1.02".

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 (17/22)	12a Direct Control (5/7)
2 Data Sets (7/9)	12b SBO Control (6/9)
2+ Data Set Definition (4/6)	12c Enhanced Direct Control (5/7)
5 Unbuffered Reporting (16/18)	12d Enhanced SBO Control (6/9)
	13 Time Synchronization (1/4)
	14 File Transfer (5/8)

This certificate includes a summary of the test results as carried out at Siemens AG in Germany with UniCA IED Simulator version 5.29.5 and UniCA 61850 Analyzer version 5.29.02. This document has been issued for information purposes only, and the original paper copy of the DNV GL report No. 10018078-OPE/INC 16-2039 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 AG. 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 10, 2016



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

Issued by:



DNV-GL
DNV KEMA is now DNV GL



R. Schimmel
Verification Manager

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

² TPCL - Test procedures change list



Applicable Test Procedures from the UCAIug Conformance Test Procedures for Client System with IEC 61850-8-1 interface, revision 1.1 with TPCL version 1.2.3

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAss4, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7 cSrv1, cSrv2, cSrv3, cSrv4, cSrv5, cSrvN1, cSrvN3, cSrvN5
2: Data Sets		cDs1, cDs2, cDs3, cDs5, cDsN1a, cDsN1b, cDsN2
2+: Data Set Definition	cDsN4	cDs6a, cDs7a, cDsN5
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRpN2, cRpN3, cRpN7, cRpN8	cRp1, cRp2, cRp7, cRpN1, cRpN4, cRpN5
12a: Direct Control	cCtl4, cCtlN1, cDOns1, cDOns2	cCtl2
12b: SBO Control	cCtl4, cCtlN1, cSBOns1, cSBOns2, cSBOns3	cCtl2
12c: Enhanced Direct Control	cCtl4, cCtlN1, cDOes1, cDOes2	cCtl2
12d: Enhanced SBO Control	cCtl4, cCtlN1, cSBOes1, cSBOes2, cSBOes3	cCtl2
13: Time sync	cTm1	
14: File transfer	cFt1, cFt2, cFt3, cFtN1, cFtN2	