



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

No. 30530058-Consulting 2005-0733

Issued to:  
Siemens A.G., PTD EA D  
Protection and Substation Control Systems  
Wernerwerkdam 5  
D-13623 Berlin  
Germany

For the product:  
Siprotec V4  
Firmware version V4.61  
Type: 7SA522

Issued by:



The product has not shown to be non-conforming to:

## IEC 61850-6, 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 with product's protocol, model and technical issue implementation conformance statements: "SIPROTEC 4 Ethernet Module EN100 IEC 61850 Electrical Interface 100 MBit Manual, version 1.4, Edition July 2005 Chapter 5, -IEC 61850 Conformance Statements-", "MICS, Mapping family 7SAx, Mapping version 1 rev. 58" and "Siemens IEC61850 Tissues conformance statement", and extra information for testing (PIXIT) "SIPROTEC Distance Protection 7SA522, 7SA6 V4.61 IEC 61850 PIXIT Edition 27-02-2006".


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 as defined in the UCA International Users Group Device Test procedures):

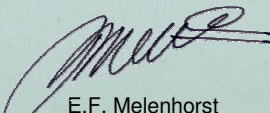
1	Basic Exchange	(17/23)	9b	GOOSE Subscribe	(9/9)
2+	Data Set Definition	(25/28)	12a	Direct Control	(6/11)
4	Setting Group Selection	(2/3)	12d	Enhanced SBO Control	(10/17)
5	Unbuffered Reporting	(13/13)	13	Time Synchronization	(3/4)
9a	GOOSE Publish	(5/11)	14	File Transfer	(3/6)

This Certificate includes a summary of the test results as carried out at the KEMA laboratory at Arnhem, The Netherlands, with UniCAsim 61850 version 2.12.03 test system running test suite "61850 Conformance Test v1.18.L", UniCAsim GOOSE version 2.12.00 with test suite "GOOSE conformance Test version 2.12.02b", UniCA 61850 analyzer version 4.11.02. The test is based on the UCA International Users Group Device Test Procedures version 1.1. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30530058-Consulting 2005-0734 will prevail.

The test have been carried out on one single specimen of the products as referred above and submitted to KEMA by Siemens. The manufacturer's production process has not been assessed. This Certificate does not imply that KEMA has certified or approved any product other than the specimen tested.

Arnhem, March 1, 2006

  
S.J.L.M. Janssen  
Managing Director KEMA Consulting

  
E.F. Melenhorst  
Senior Test Engineer

1 Level A – Independent Test Lab with certified ISO 9000 or ISO 17025 Quality System

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