



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

No. 30430035-Consulting 2005-0260

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

For the product:  
SIPROTEC V4  
Software Version V4.60  
Type: 7SJ64

Issued by: **KEMA**

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 1.3, Edition March 2005 Chapter 5, -IEC 61850 Conformance Statements-", "MICS, Mapping family 7SJ64, Mapping version 1 rev. 55" and "Siemens IEC61850 Tissues conformance statement", and extra information for testing (PIXIT) "SIPROTEC Multi-Functional Protective Relays 7SJ61...7SJ64V4.6 IEC 61850 PIXIT Edition 18-01-2005".

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 (14/23)	9ab	Generic Object Oriented Substation Events (14/20)
2+	Data Set Definition (25/28)	12ad	Direct Control and Enhanced SBO Control (13/24)
4	Setting Group Selection (2/3)	13	Time Synchronization (4/4)
5	Unbuffered Reports (11/13)	14	File Transfer (3/6)

KEMA grants this Certificate on account of tests performed at the AEP/Dolan laboratories in Columbus (OH), U.S.A. These tests are performed with UniCASim 61850 version 2.11.01 test system running test suite "61850 Conformance Test v1.16", UniCASim GOOSE version 2.11.01 with test suite "GOOSE conformance Test version 2.11.01", UniCA 61850 analyzer version 4.10.03. The test is based on the UCA International Users Group Device Test Procedures version 1.1. The results are described in KEMA report: No. 30430035-Consulting 2005-0259.

The tests have been carried out on one single specimen of the above-mentioned products, submitted by Siemens A.G. The Certificate does not include an assessment of the manufacturer's production process. Conformity of his production process with the specimen tested by KEMA is not the responsibility of KEMA.

Arnhem, April 18, 2005

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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