



IEC 61850 Certificate Level A¹

International
Usersgroup

No. 30710079-Consulting 07-0418

Issued to:
Areva T&D
Lyoner Strasse 44-48
D-60528 Frankfurt am Main
Germany

For the product:
MiCOM P132
Feeder Management and Bay Control
Firmware version -611 -204



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: "P132 Feeder Management and Bay Control Version -611 -204 PICS, MICS and Address Assignment List", "PX30 Version -6xx -2xx Technical Issues (TISSUES)" and product's extra information for testing: "PX3X/EN PX Version 01C Protocol Implementation Extra Information for Testing (PIXIT) of the IEC 61850 Communication Interface with Control".

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 v1.1):

1 Basic Exchange (16/23)	12a Direct Control (4/11)
2 Data Sets (2/5)	12c Direct Enhanced Control (5/11)
5 Unbuffered Reporting (10/13)	12d SBO Enhanced Control (10/17)
9ab Generic Object Oriented Substation Event (16/20)	13 Time Synchronization (3/4)
	14 File Transfer (3/6)

This Certificate includes a summary of the test results as carried out at in with UniCASim 61850 version 2.15.00 with test suite 2.15.00 and UniCA 61850 analyzer 4.15. 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. 30710079-Consulting 07-0417 will prevail.

The test have been carried out on one single specimen of the products as referred above and submitted to KEMA by Areva. 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, June 5, 2007

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

R. Schimmel
Certification Manager

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System

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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 1.1

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	SrvN1e, SrvN3
2: Data Sets	Dset1, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7 RpN1, RpN2, RpN3, RpN4	Rp5
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a: Direct control	CtlN3, CtlN8, DOns1, DOns3	
12c: Direct enhanced control	CtlN3, CtlN8, DOes2, DOes5	Ctl7
12d: SBO enhanced control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4 CtlN9, SBOes1, SBOes2, SBOes3	Ctl7
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, FtN1ab	