



IEC 61850 Certificate Level A¹

No. 30920191-Consulting 09-0564

Issued to:
AREVA T&D UK Ltd Products Plant
St. Leonards Avenue
ST174LX
ENGLAND

For the product:
AREVA MiCOM P143
Feeder Management Relay
Firmware version 42C



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: "MiCOM P143 Feeder Management Relay Version 42C PICS and MICS", "MiCOM P14x Feeder Management Relay Version 42C TICS" and product's extra information for testing: "MiCOM P14x Feeder Management Relay Version 42 PIXIT".

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 v2.2):

1 Basic Exchange (19/24)	9b GOOSE Subscribe (9/10)
2 Data Sets (3/6)	12a Direct Control (4/12)
4 Setting Group Selection (2/3)	12b SBO Control (5/16)
5 Unbuffered Reporting (13/18)	12c Enhanced Direct Control (4/13)
6 Buffered Reporting (15/20)	12d Enhanced SBO Control (10/20)
9a GOOSE Publish (8/11)	13 Time Synchronization (3/5)
	14 File Transfer (6/7)

This Certificate includes a summary of the test results as carried out at KEMA in Arnhem, The Netherlands with UniCasim 61850 version 3.18.00 with test suite 3.18.00 and UniCA 61850 analyzer 4.18.01. The test is based on the UCA International Users Group Device Test Procedures version 2.2. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. No. 30920191-Consulting 09-0563 will prevail.

The test has 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, 3 April 2009

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Manager Intelligent Networks and Communication

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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 2.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
4: Setting Group Selection	Sg1, SgN1	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7 RpN1, RpN2, RpN3, RpN4	Rp5, Rp10, RpN5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop5, Gop6, GopN1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a: Direct control	CltN3, CltN8 DOns1, DOns3	
12b: SBO control	Clt3, CltN1, CltN2, CltN4 SBOns2	
12c: Enhanced Direct Control	CltN3, CltN8 DOes2, DOes5	
12d: Enhanced SBO control	Clt3, CltN1, CltN2, CltN3, CltN4, CltN9 SBOes1, SBOes2, SBOes3	CltN11
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	FtN1c, Ft2c