



IEC 61850 Certificate Level A¹

International
Usersgroup

No. 30710139-Consulting 08-0041

Issued to:
ELIOP S.A.
Pol. Ind. Alcobendas
Avda. Valgrande, 8
28108 Madrid
Spain

For the product:
iBC 5000 (Elitel 5/5000)
IEC 61850 Server
Version 1.09 Review 5



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: "iBC5000-PICS v1.3", "iBC5000-MICS v1.3", "iBC5000-TICS v1.4" and product's extra information for testing: "iBC5000-PIXIT v1.3".

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 (19/23)	9b GOOSE Subscribe (9/9)
2 Data Sets (2/5)	12a Direct Control (3/11)
5 Unbuffered Reporting (13/13)	12b SBO Control (4/15)
6 Buffered Reporting (14/15)	13 Time Synchronization (2/4)
9a GOOSE Publish (6/11)	14 File Transfer (3/6)

This Certificate includes a summary of the test results as carried out at Robotiker in Zamudio, Spain with UniCasim 61850 version 3.16.01 with test suite 3.16.03 and UniCA 61850 analyzer 4.16.00. 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. 30710139-Consulting 08-0040 will prevail.

The test have been carried out on one single specimen of the products as referred above and submitted to KEMA by ELIOP. 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, December 17, 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	Srv6, Srv7, Srv8, SrvN1e, SrvN3
2: Data Sets	Dset1, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7 RpN1, RpN2, RpN3, RpN4	Rp5, Rp6, RpN5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6
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, (SBOs2)	
13 Time sync	Tm1, Tm2, (TmN1)	
14 File transfer	Ft1, Ft2ab, FtN1ab	

(TmN1) = Time quality is always valid

(DOns3), (SBOs2) = Could not force "Test-not-OK"