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

No. 30520015-Consulting 07-0888

Issued to: ZIV P+C Parque Tecnologico, 210 48170 Zamudio Spain

Issued by:

KEMA₹

For the product: #IRV-A Type: 7IRV-A3N-220400VB OS version 2.0 Application version 3.13

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: "PICS of the IEC 61850 communication interface in #IRV-A, revision 3", "MICS of the IEC 61850 communication interface in #IRV-A, revision 6", "IEC 61850 Tissues Conformance Statement" and extra information for testing (PIXIT) "PIXITof the IEC 61850 communication interface in #IRV-A, revision 6".

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 (20/23)	9ab Generic Object Oreiented Substation Events (14/20)
2 Data Sets (2/5)	12a Direct Control (5/11)
<ul><li>5 Unbuffered Reports (9/13)</li><li>6 Buffered Reports (12/15)</li></ul>	12cEnhanced Direct Control (7/11)13Time Synchronization (3/4)

This Certificate includes a summary of the test results as carried out at ZIV P+C, Spain, with UniCAsim 61850 version 2.14.01 test system running test suite "61850 Conformance Test v2.14.04", UniCA 61850 analyzer version 4.15.00. 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. 30520015-Consulting 07-0749 will prevail.

The tests have been carried out on one single specimen of the products as referred above and submitted to KEMA by ZIV P+C. 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, April 3, 2007

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

Muse

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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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, SrvN2, SrvN3, SrvN4	Srv6, Srv7, Srv8, SrvN1e
2: Data Sets	Dset1, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp4, RpN1, RpN2, RpN3, RpN4	Rp5, RpN6
6. Buffered Reporting	Br1, Br2, Br4, Br8, Br9, BrN1, BrN2, BrN3, BrN4, BrN5	Br5, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a Direct control	CltN3, CtIN8, DOns1	Ctl2, Ctl7
12c Enhanced Direct control	CtIN3, CtIN8, DOes2, DOes5	Ctl2, Ctl7, CtlN6
13 Time sync	Tm1, Tm2, TmN1	

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