



IEC 61850 Certificate Level A¹

No. 12131046-MOC/INC E-13-I-197-PR

Issued to:
 ZIV GRID Automation S.L.
 Parque Tecnológico, 210
 48170 Zamudio, Bizkaia
 Spain

For the server product:
 IDV (#IDV-***-***-**A6***)
 Differential protection relay
 Firmware version 7.3R



The server product has not shown to be non-conforming to:
IEC 61850 First Edition Parts 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, the UCA International Users Group Device Test Procedures version 2.3 with TPCL² version 1.7, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in #IDV-***-***-**6*** from ZIV Aplicaciones y Tecnología Version 0.0", "Model Implementation Conformance Statement for the IEC 61850 interface in #IDV-***-***-**6*** from ZIV Aplicaciones y Tecnología Version 0.0" and "TISSUES Implementation Conformance Statement for the IEC 61850 interface in #IDV-***-***-**6*** from ZIV Aplicaciones y Tecnología Version 0.0" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in #IDV-***-***-**6*** from ZIV Aplicaciones y Tecnología Version 0.0".

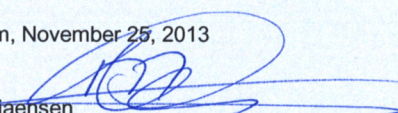
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

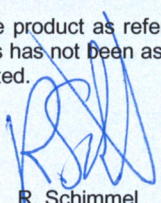
| | | | |
|----|--------------------------------|-----|--------------------------------|
| 1 | Basic Exchange (21/24) | 9b | GOOSE Subscribe (10/11) |
| 2 | Data Sets (3/6) | 12a | Direct Control (5/12) |
| 4 | Setting Group Selection (3/3) | 12b | SBO Control (8/14) |
| 4+ | Setting Group Definition (7/7) | 12c | Enhanced Direct Control (7/13) |
| 5 | Unbuffered Reporting (16/19) | 12d | Enhanced SBO Control (12/19) |
| 6 | Buffered Reporting (18/21) | 13 | Time Synchronization (4/5) |
| 9a | GOOSE Publish (11/13) | 14 | File Transfer (6/7) |

This certificate includes a summary of the test results as carried out at ZIV GRID Automation S.L. in Spain with UniCA 61850 Client simulator 4.26.04 with test suite 3.27.00 and UniCA 61850 Analyzer 5.27.04. This document has been issued for information purposes only, and the original paper copy of the KEMA report No. 12131046-MOC/INC E-13-I-196-PR will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KEMA by ZIV GRID Automation S.L. The manufacturer's production process has not been assessed. This attestation does not imply that KEMA has approved any product other than the specimen tested.

Arnhem, November 25, 2013


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 Director Intelligent Networks & Communication


 R. Schimmel
 Certification Manager

¹ Level A - Independent test lab with certified ISO 9001 Quality System

² TPCL - Test procedures change list

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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.7

| 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, SrvN1f, SrvN2, SrvN3 |
| 2: Data Sets | Dset1, Dset10a, DsetN1ae | |
| 4: Setting Group Selection | Sg1, SgN1a, Sg3 | |
| 4+: Setting Group Definition | Sg2, Sg4, SgN1b, SgN2, SgN3, SgN4, SgN5 | |
| 5: Unbuffered Reporting | Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4 | Rp5, Rp8, Rp9, RpN5, RpN6 |
| 6: Buffered Reporting | Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5 | Br5, Br10, Br11, BrN6 |
| 9a: GOOSE publish | Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a | Gop1, Gop6, Gop10b, GopN1, GopN2 |
| 9b: GOOSE subscribe | Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6 | Gos1b |
| 12a: Direct control | CtlN3, CtlN8 DOns1 | Ctl2, Ctl7 |
| 12b: SBO control | Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, SBOs2 | Ctl2, Ctl7 |
| 12c: Enhanced Direct Control | CtlN3, CtlN8 DOes2, DOes5 | Ctl2, Ctl7, CtlN6 |
| 12d: Enhanced SBO control | Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3 | Ctl2, Ctl7, CtlN6 |
| 13: Time sync | Tm1, Tm2, TmN1 | Tm3 |
| 14: File transfer | Ft1, Ft2ab, Ft4, FtN1ab | Ft2c, FtN1c |