

CENTRAL POWER RESEARCH INSTITUTE

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IEC 61850 Certificate Level A¹



No.: CPRIBLRMUADSASL19TC0001

Issued to:

ZIV Automation India Pvt Ltd.,
Global Village Tech Park,
DRC Building, Ground Floor, RVCE Post,
Mylasandra, Bangalore – 560059, INDIA.

For the server product:

DISTANCE PROTECTION RELAY
Model No: ZLV
Hardware Version: 8ZLV-F4F-2C02H82NL
Software Version: 04.03.06
Serial No.: 690116

Issued by: CENTRAL POWER RESEARCH INSTITUTE, India

**The server product has not been 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 Server Device Test Procedures version 3.2, the product's protocol, model and technical issue implementation conformance statements: "PICS version 1.01", "MICS version 1.01", "TICS version 1.01" and the extra information for testing: "PIXIT version 1.01".

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 (22/25) | 9b GOOSE Subscribe(10/11) |
| 2 Data Sets (3/6) | 12a Direct Control (5/11) |
| 4 Setting Group Selection (3/3) | 12b SBO Control (7/14) |
| 4+ Setting Group Definition (7/7) | 12c Enhanced Direct Control (7/13) |
| 5 UnBuffered Reporting (16/18) | 12d Enhanced SBO Control (11/19) |
| 6 Buffered Reporting (23/27) | 13 Time Synchronization (4/5) |
| 9a GOOSE Publish (11/12) | 14 File Transfer (6/7) |

This Certificate includes a summary of the test results as carried out at CPRI, Bangalore in India with UniCasim 61850 version 4.31.02.5461 test system with test suit "61850 Conformance Test TP 3.03 v3.31.00" and UniCA 61850 Analyzer version 5.34.01.0. This document has been issued for information purposes only and the original paper copy of the CPRI Report No.: CPRIBLRMUADSASL19T0001; Dated: 04 February, 2019 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to CPRI by M/s.ZIV Automation India Pvt Ltd., Global Village Tech Park, DRC Building, Ground Floor, RVCE Post, Mylasandra, Bangalore – 560059, INDIA. The manufacturer's production process has not been assessed. This Certificate does not imply that CPRI has approved any product other than the specimen tested.

Bangalore; 04 February, 2019

(Harinath Babu P V)
Joint Director




(Pradish M)
Engineering Officer


Test Report Reference No: CPRIBLRMUADSASL19T0001; Dated: 04 February, 2019

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Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 3.2

| Conformance Block | Mandatory | Conditional |
|------------------------------|--|--|
| 1: Basic Exchange | Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4 | AssN3, AssN6, 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, Rp9, RpN1, RpN2, RpN3, RpN4, RpN8 | Rp5, Rp8, Rp10, Rp11, Rp12, RpN5 |
| 6: Buffered Reporting | Br1, Br2, Br3, Br4, Br9, Br20, Br21, Br22, Br25, Br26, Br27, Br28 BrN1, BrN2, BrN3, BrN4, BrN5, BrN8 | Br5, Br8, Br10, Br11, Br12 |
| 9a: GOOSE publish | Gop2, Gop3, Gop4, Gop9, Gop10a | Gop1, Gop6, Gop7, Gop10b, GopN1, GopN2 |
| 9b: GOOSE subscribe | Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6 | Gos1b |
| 12a: Direct control | CtlN3, DOns1 | Ctl2, Ctl7, DOns3 |
| 12b: SBO control | CtlN1, CtlN2, CtlN3, CtlN4 SBOns2 | Ctl2, Ctl7 |
| 12c: Enhanced Direct Control | CtlN3, DOes2, DOes5 | Ctl2, Ctl7, CtlN6, CtlN8 |
| 12d: Enhanced SBO control | CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3 | Ctl2, Ctl7, CtlN6 |
| 13: Time sync | Tm1, Tm2 | Tm3, TmN1 |
| 14: File transfer | Ft1, Ft2ab, Ft4, FtN1ab | Ft2c, FtN1c |


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