

CENTRAL POWER RESEARCH INSTITUTE



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International IEC 61850 Certificate Level A



No.: CPRIBLRMUADSASL19TC0006

Issued to:

CG POWER & INDUSTRIAL SOLUTIONS LTD... A - 3, MIDC - Ambad, Nashik - 422010 INDIA

For the server product:

Aegis Feeder/ Motor Protection Relay

Type: Aegis F/M Hardware Version: 10

Software Version: A1-03-10-51 Serial No.: CGF0719001

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 3.3a, the product's protocol, model and technical issue implementation conformance statements: "Aegis F-M IEC 61850 PICS_v2.10", "Aegis F-M IEC 61850 TICS_v2.10" and the extra information for testing: "Aegis F-M IEC 61850 PIXIT_v2.10".

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):

- Basic Exchange (18/25)
- 2 Data Sets (4/6)
- 5 UnBuffered Reporting (18/18)
- 6 Buffered Reporting (25/27)
- 9a GOOSE Publish (11/12)

- 9b GOOSE Subscribe(11/11)
- 12a Direct Control (3/11)
- 12d Enhanced SBO Control (9/19)
- Time Synchronization (4/5)
- File Transfer (6/7)

This Certificate includes a summary of the test results as carried out at CPRI, Bangalore in India with Client Simulator UniCAsim version 4.31.02.5461 test system with test suit "61850 Conformance Test TP Ed1 3.03 v3.31.00" and UniGrid SA Simulator version 1.5.0.0 with test suit version IEC61850Ed2Server1.2.6-v1.0.143 and UniCA 61850 analyzer version 5.34.02.0. This document has been issued for information purposes only, and the original paper copy of the CPRI Report No.: CPRIBLRMUADSASL19T0006; dated: 16 August, 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. CG Power & Industrial Solutions Ltd., A-3, MIDC - Ambad, Nashik - 422010, 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; 16 August, 2019

(Harinath Babu P V) Joint Director

(Pradish M) **Engineering Officer**

Test Report Reference No: CPRIBLRMUADSASL19T0006; Dated: 16 August, 2019

1 Level A - Independent Test lab with certified ISO/IEC 17025 Quality System.



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Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 3.3a

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, Srv6, Srv7, Srv8, SrvN1f
2: Data Sets	Dset1, Dset10a, DsetN1ae	DsetN1b
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp9, RpN1, RpN2, RpN3, RpN4, RpN8	Rp5, Rp6, Rp7, 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, Br6, Br7, 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, Gos4
12a: Direct control	CtlN3, DOns1	Ctl2
12d: Enhanced SBO control	CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3	Ctl2
13: Time sync	Tm1, Tm2	Tm3, TmN1
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, FtN1c

(Harinath Babu P V)
Joint Director

(Pradish M)
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