

# CENTRAL POWER RESEARCH INSTITUTE



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

No.: CPRIBLRMUADSASL22TC0007

#### Issued to:

M/s. CG Power and Industrial Solutions Limited A-3, MIDC Ambad, Nashik - 422010. INDIA

### For the server product:

Numerical Protection Relay

Model No.: AEGIS SERIES NUMERICAL

PROTECTION RELAY

Serial No.: CGF0322516 Hardware Version: 10 Software Version: A2-01

Issued by: CENTRAL POWER RESEARCH INSTITUTE, India

The server product has not been shown to be non-conforming to:

IEC 61850 Edition 2 Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems for power utility automation

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Server Test Procedures version 2.0.6 with product's protocol, model and technical Issue implementation conformance statements: "PICS\_AEGIS\_E2\_v2.10; dated: 11th July 2022", "MICS\_AEGIS\_E2\_v2.10; dated: 11th July 2022", "TICS\_AEGIS\_E2\_v2.10; dated: 11th July 2022" and product's extra information for testing: "PIXIT\_AEGIS\_E2\_v2.10; dated: 11th July 2022".

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

1 Basic Exchange (19/26)

2 Data Sets (4/7)

5 Unbuffered Reporting (21/23)

6 Buffered Reporting (29/33)

9a GOOSE Publish (10/13)

9b GOOSE Subscribe (19/21)

12a Direct Control (6/18)

12d Enhanced SBO Control (14/28)

13 Time Synchronization (4/7)

14 File Transfer (5/8)

This Certificate includes a summary of the test results as carried out at Central Power Research Institute (CPRI), Bangalore in India with Client Simulator UniGrid SA Simulator version 2.0.1 with test suit version Ed2\_Server\_TP\_2.0.5\_v1.1.1+755 and UniCA 61850 analyzer version 6.41.00.0. This document has been issued for information purposes only, and the original paper copy of the CPRI report No.: CPRIBLRMUADSASL22T0007; dated 20 July, 2022 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 and Industrial Solutions Limited, A-3, MIDC Ambad, Nashik - 422010, INDIA. The manufacturer's production process has not been assessed. This certificate does not imply that CPRI has certified or approved any product other than the specimen tested.

Bangalore; 20 July, 2022

(V Shivakumar)
Joint Director

(Pradish M) Test Engineer

<sup>&</sup>lt;sup>1</sup> Level A – Independent Test lab with certified ISO/IEC 17025 Quality System. UCA International Users Group, P.O. Box 315, Shell Knob, MO 65747, USA





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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 2.0.6

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrv8, sSrvN1abcdf, sSrvN4	sAssN6, sSrv9, sSrv10
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6,sRp7,sRp8, sRp10, sRp11, sRp12, sRp15, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr16, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBr29, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr6,sBr7,sBr8, sBr10, sBr11, sBr12, sBr15
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop6, sGopN1
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGos8, sGos9, sGos10, sGos11, sGos12,sGos23, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos4
12a Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCti2, sCti13
12d Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl2, sCtl4, sCtl6, sCtl26
13 Time sync	sTm1, sTm2, sTmN1	sTm3
14 File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	* ***

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