

# CENTRAL POWER RESEARCH INSTITUTE

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**UCA**  
International  
Users Group

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



No.: CPRIBLRMUADSASL20TC0003

### Issued to:

M/s. GE T&D INDIA LIMITED  
19/1, G.S.T. ROAD, PALLAVARAM,  
CHENNAI - 600043  
INDIA

### For the server product:

BAY CONTROL UNIT  
Type: DS Agile C264  
Model No.: C264NB1S6AB001302200B00000010  
Serial No.: 34829043/07/19  
Hardware Version: CPUv4  
Software Version: DS Agile 7.6.1.2-base

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 1.0 with TPCL<sup>2</sup> version 1.2.6 with product's protocol, model and technical issue implementation conformance statements: "PICS version PICS\_DS AgileV7\_C264\_B1.1, rev-B1.1", "MICS version MICS\_DS AgileV7\_C264\_A1, rev-1.0", "TICS version TICS\_DS AgileV7\_C264\_A1, rev-1.0" and product's extra information for testing: "PIXIT version PIXIT\_Server\_DS AgileV7\_C264\_B1.4, rev-B1.4".

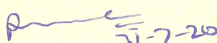
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test):

1 Basic Exchange (20/26)	9b GOOSE Subscribe (12/14)
2 Data Sets (4/7)	12a Direct Control (9/18)
3 Substitution (3/3)	12c Enhanced Direct Control (10/20)
5 Unbuffered Reporting (18/21)	12d Enhanced SBO Control (17/28)
6 Buffered Reporting (27/30)	13 Time Synchronization (4/7)
9a GOOSE Publish (12/13)	14 File Transfer (8/8)

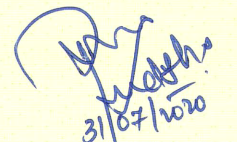
This Certificate includes a summary of the test results as carried out at Central Power Research Institute (CPRI), Bangalore in India with Client Simulator UniCASim version 4.31.02.5461 and UniGrid SA Simulator version 1.6.7.0 with test suit version IEC61850Ed2ServerTPCL\_1.2.6-v1.0.282 and UniCA 61850 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.: CPRIBLRMUADSASL20T0003; dated 31 July, 2020 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to CPRI by GE T&D India Limited, 19/1, G.S.T. Road, Pallavaram, Chennai – 600043 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; 31 July, 2020

  
(Harinath Babu P V)  
Joint Director



  
(Pradish M)  
Test Engineer

Test Report Reference No.: CPRIBLRMUADSASL20T0003; dated 31 July, 2020

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

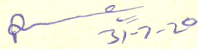
2 Test Procedure Change List .



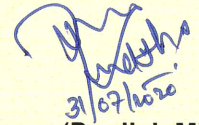
No.: CPRIBLRMUADSASL20TC0003

Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL version 1.2.6

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv8, sSrv9, sSrv10, sSrv12, sSrvN1f
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
3: Substitution	sSub1, sSub2, sSub3	
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr15, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr8, sBr10, sBr11, sBr12, sBr23, sBr24
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11	sGop1, sGop2b, sGop6, sGop7, sGopN1, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	
12a: Direct control	sCtl5, sCtl10, sDOs1, sDOs2	sCtl7, sCtl15, sCtl16, sCtl23, sCtl24
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl7, sCtl14, sCtl15, sCtl16, sCtl23, sCtl24
12d: Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4, sCtl6, sCtl7, sCtl15, sCtl16, sCtl26, sSBOes7
13: Time sync	sTm1, sTm2, sTmN1	sTm3
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFt3, sFtN1c

  
31-7-20

**(Harinath Babu P V)**  
Joint Director

  
31/07/2020

**(Pradish M)**  
Test Engineer