

# CENTRAL POWER RESEARCH INSTITUTE

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



No.:MUADSASL1718C008

**Issued to:**

Megawin Switchgear Private Limited,  
Post Box No: 434, Perumal Malai Adivaram,  
Alagapuram, Salem-636004,  
Tamilnadu, India

**For the server product:**

NUMERICAL OVERCURRENT PROTECTION RELAY  
Type/Model: M140c  
Hardware Version: M140c-1603AERYXXR063-00  
Software Version: 3.1.17  
Serial No.: M140C0412170001

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 3.04, 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 (16/25)	12a Direct Control (4/11)
2 Data Sets (3/6)	12b SBO Control (6/14)
5 UnBuffered Reporting (18/18)	12c Enhanced Direct Control(4/13)
6 Buffered Reporting (25/27)	12d Enhanced SBO Control(9/19)
9a GOOSE Publish (8/12)	13 Time Synchronization (2/5)
9b GOOSE Subscribe(10/11)	

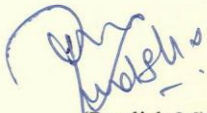
This Certificate includes a summary of the test results as carried out at CPRI, Bangalore in India with UniCAsim 61850 version 4.31.02 test system with test suit "61850 Conformance Test TP 3.03 v3.31.00" and UniCA 61850 analyzer version 5.34.01. This document has been issued for information purposes only and the original paper copy of the CPRI Report No.: MUADSASL1718T008; Dated: 27 March 2018 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.Megawin Switchgear Private Limited, Post Box No: 434, Perumal Malai Adivaram, Alagapuram, Salem-636004, Tamilnadu, 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, 27 March 2018

  
(Harinath Babu P V)  
Joint Director



  
(Pradish M)  
Test Engineer

Report Reference No: MUADSASL1718T008; Dated: 27 March 2018

Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 3.04

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3 Srv8, SrvN1f
2: Data Sets	Dset1, Dset10a, DsetN1ae	
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, Gop7, Gop10b
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtIN3, DOns1	CtIN11, DOns3
12b: SBO control	CtIN1, CtIN2, CtIN3, CtIN4 SBOs2	CtIN11
12c: Enhanced Direct Control	CtIN3, DOes2, DOes5	CtIN11
12d: Enhanced SBO control	CtIN1, CtIN2, CtIN3, CtIN4, CtIN9 SBOes1, SBOes2, SBOes3	CtIN11
13: Time sync	Tm1, Tm2	

27-3-18  
(Harinath Babu P V)  
Joint Director



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