



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

International  
Usersgroup

No. 30820191-Consulting 08-2413

Issued to:  
Mitsubishi Electric Corporation  
Protection & Control Systems  
Transmission & Distribution Systems Center  
Kobe,  
Japan

For the product:  
MR4010E Bay Control and Monitoring  
With firmware version: com506\_00000005



The product has not shown to be non-conforming to:  
**IEC 61850-6, 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 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC61850 in MR4010E series, Version 0.1", "Model Implementation Conformance Statement for the IEC61850 interface in MR4010E, Version 0.0", "IEC61850 Tissues Conformance Statement for the IEC61850 interface in MR4010E series, Version 0.0" and product's extra information for testing: "Protocol implementation extra information for testing (PIXIT) of the IEC 61850 communication interface in MR4010E series, Version 0.3".

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 as defined in the UCA International Users Group Device Test procedures v1.1):

1 Basic Exchange (14/23)	9b GOOSE Subscribe (9/9)
2 Data Sets (2/5)	12a Direct Control (4/11)
4+ Setting Group Definition (10/11)	12d Enhanced SBO Control (10/17)
6 Buffered Reporting (14/15)	13 Time Synchronization (3/4)
9a GOOSE Publish (7/11)	14 File Transfer (3/6)

This Certificate includes a summary of the test results as carried out at KEMA Consulting in The Netherlands with UniCasim 61850 version 3.17.01 with test suite 3.18.00 and UniCA 61850 analyzer 4.18.01. The test is based on the UCA International Users Group Device Test Procedures version 1.1. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30820191-Consulting 08-2412 will prevail.

The test has been carried out on one single specimen of the products as referred above and submitted to KEMA by Mitsubishi. The manufacturer's production process has not been assessed. This Certificate does not imply that KEMA has certified or approved any product other than the specimen tested.

Arnhem, November 4

W. Strabbing  
Manager Intelligent Networks and Communication

M. Flohil  
Test engineer

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System

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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 1.1

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	
2: Data Sets	Dset1, DsetN1ae	
4+: Setting Group Definition	Sg1, Sg2, Sg3, Sg4, Sg5 SgN1a, SgN2, SgN3, SgN4, SgN5	
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a: Direct control	CltN3, CtlN8 DOns1, DOns3	
12d: Enhanced SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3	Ctl7
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, FtN1ab	