

IEC 61850 Certificate Level A¹

Issued to:

Mitsubishi Electric Corporation Nagoya Works
1-14 Yada-Minami
5-chome
Higashi-ku
Nagoya 461-8670
Japan

For the client system:

RD55UP12-V Intelligent Function Module
with iQ-R R32PCPU CPU Module
RD55UP12-V software version: 1.4.0
RD55UP12-V S/N: 01017821F1210101-5
R32PCPU S/N: 07053C22F0210131-F
Interface type: Ethernet (RJ45)

The client system 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 in substations

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Client Conformance Test Procedures version 1.2 with client system's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in IEC 61850 Protocol Component for RD55UP12-V Intelligent Function Module, version 1.0", "Model Implementation Conformance Statement for the IEC 61850 Client Interface in RD55UP12-V Intelligent Function Module, version 1.0" and "TISSUES Implementation Conformance Statement for the IEC 61850 Edition 2 Client Interface in RD55UP12-V Intelligent Function Module, version 1.0" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client interface in IEC 61850 Protocol Component for RD55UP12-V Intelligent Function Module, date 01.07.2024".

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 (15/24)	12a Direct Control (5/9)
2 Data Sets (1/10)	12b SBO Control (6/11)
5 Unbuffered Reporting (17/24)	12c Enhanced Direct Control (5/9)
	12d Enhanced SBO Control (6/11)

This certificate includes a summary of the test results as carried out at DNV in The Netherlands with UniGrid SA for Client testing 3.0 with client test suite 3.0 and UniCA 61850 Analyzer 6.45. This document has been issued for information purposes only, and the archived DNV verification report No. No. 10495143-DSO 24-4292 rev 2 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV by Mitsubishi Electric Corporation Nagoya Works. The manufacturer's production process has not been assessed. This certificate does not imply that DNV has approved any product other than the specimen tested.

Arnhem, August 8, 2024



K. Kontothanasis
Test Engineer

Issued by:




R. Schimmel
Verification Manager

¹ Level A - Independent test lab with certified ISO 9001 Quality System

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Applicable Test Procedures from the UCA International Users Group Edition 2 Client Conformance Test Procedures version 1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7, cSrv5, cSrv6, cSrv7, cSrv10, cSrvN3, cSrvN4, cSrvN5
2: Data Sets		cDs5
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp19, cRpN2, cRpN5, cRpN6	cRp7, cRp16, cRp18
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl2
12b: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3	cCtl2
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl2
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl2