IEC 61850 Certificate Level A[1]

Issued to:

STRATON AUTOMATION
Parc Sud Galaxie
Rue du Sextant
38130 Echirolles
France

For the client system:

Brodersen RTU32M with module MP32A
IEC 61850 firmware: straton runtime version 1601.51104
S/N: BB61A

The client system has not been shown to be non-conforming to:

IEC 61850 Edition 2 Amendment 1 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 with Amendment 1, the UCA International Users Group Edition 2 with Amendment 1 Client Conformance Test Procedures version 1.0 with client system's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in RTU32M straton runtime version 16 date 11/11/2025", "Model Implementation Conformance Statement for Ed1 + Ed2 + Ed2Amd1 for the IEC 61850 Client Interface in RTUE32M running with straton runtime version 16, date: 11.11.2025" and "Tissues Implementation Conformance statement (TICS) for the IEC 61850 Client interface in RTU 32M straton runtime IEC61850 stack, date: November 11, 2025" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client interface in RTU32M using straton runtime IEC 61850 stack; date: November 11, 2025".

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):

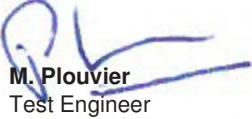|				
1a	Basic Exchange (24/31)		12a	Direct Control (7/9)
2	Data Sets (6/10)		12b	SBO Control (10/12)
3	Substitution (3/3)		12c	Enhanced Direct Control (7/9)
4	Setting Group Selection (3/4)		12d	Enhanced SBO Control (9/11)
4+	Setting Group Definition (5/5)		13a	Time Synchronization SNTP (3/4)
5	Unbuffered Reporting (30/34)		14	File Transfer (7/9)
6	Buffered Reporting (27/31)		15	Service Tracking (13/17)
9	GOOSE Control Block (3/3)			

This certificate includes a summary of the test results as carried out at DNV in The Netherlands with UniGrid SA Simulator version 4.1.0 and UniCA 61850 Analyzer 6.46.03. This document has been issued for information purposes only, and the archived DNV verification report No. 10573793-DSO 25-3026 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 STRATON AUTOMATION. 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, November 11, 2025

Issued by:

M. Plouvier
Test Engineer

R. Schimmel
Verification Manager

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

IEC 61850 Certificate Level A

Applicable Test Procedures from the UCA International Users Group Edition 2 with Amendment 1 Client Conformance Test Procedures version 1.0

Conformance Block	Mandatory	Conditional
1a: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6, cAssN8	cAssN7, cSrv1, cSrv4, cSrv5, cSrv6, cSrv7, cSrv9, cSrv10 cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6, cSrvN7, cSrvN8, cSrvN9
2: Data Sets		cDs1, cDs2, cDs5, cDs6 cDsN1a, cDsN1b
3: Substitution	cSub1, cSub3	cSub2
4: Setting Group Selection	cSg2, cSg46, cSgN1	
4+: Setting Group Definition	cSg11, cSg14	cSg10, cSg12, cSg13
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp18, cRp19, cRp20, cRp21, cRp22, cRp40, cRp41, cRp42, cRp43, cRp44, cRp45, cRp46, cRpN2, cRpN5, cRpN6	cRp2, cRp6, cRp7, cRp16, cRp17
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr18, cBr19, cBr20, cBr21, cBr22, cBr30, cBr31, cBr46, cBrN2, cBrN5, cBrN6	cBr2, cBr6, cBr7, cBr16, cBr17, cBr32
9: GOOSE control block		cGcb1, cGcb2, cGcb46
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2, cCtl3
12b: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3, cSBOns10	cCtl1, cCtl2, cCtl3, cSBOns4
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl1, cCtl2, cCtl3
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2, cCtl3, cSBOes4
13a: Time sync SNTP	cTm1, cTmN1	cTmN2
14: File transfer	cFt1, cFt3, cFt6, cFtN1	cFt2, cFt5, cFtN2
15: Service Tracking		cTrk1, cTrk2, cTrk4, cTrk7, cTrk8, cTrk9, cTrk10, cTrk11, cTrk12, cTrk13, cTrk14, cTrk15, cTrk16

Test case	Limitations or Comments
Service Tracking	Test case numbering updated according to redmine #6654