

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

**Issued to:**

Elvexys SA  
Route de Montena 65  
1728 Rossens  
Switzerland

**For the client system:**

StreamBridge  
Multi-protocol gateway  
Setup version: 6.4.11  
Hardware version: MOXA DA-820C  
S/N: TAIGE1020738

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 StreamBridge: Stream61850 Client side, version 1.02", "Model Implementation Conformance Statement for the IEC 61850 interface in StreamBridge: Stream61850 Client side, version 1.03" and "TISSUES Implementation Conformance Statement (TICS) for the IEC 61850 Edition 2 interface in StreamBridge: Stream61850 Client side, version 1.01" and product's extra information for testing: "Protocol Implementation eXtra Information for the IEC 61850 interface in StreamBridge: Stream61850 Client side, version 1.04".

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 (21/24)        | 12a Direct Control (5/9)          |
| 2 Data Sets (6/10)              | 12b SBO Control (7/11)            |
| 2+ Data Set Definition (5/8)    | 12c Enhanced Direct Control (5/9) |
| 3 Substitution (3/3)            | 12d Enhanced SBO Control (7/11)   |
| 4 Setting Group Selection (3/3) | 13 Time Synchronization (3/4)     |
| 5 Unbuffered Reporting (20/24)  | 14 File Transfer (3/8)            |
| 6 Buffered Reporting (24/28)    |                                   |

This certificate includes a summary of the test results as carried out at DNV in The Netherlands with UniCA 61850 IED Simulator version 6.1.31 and UniCA 61850 Analyzer 6.40.01. This document has been issued for information purposes only, and the archived DNV verification report No. 10306263-INC 21-3379 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 Elvexys SA. 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, December 10, 2021



**N.A. Heijker**  
Business Leader  
Interoperability of Smart Power Systems

**Issued by:**



**DNV**



**R. Schimmel**  
Verification Manager

<sup>1</sup> 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, cSrv1, cSrv2, cSrv4, cSrv5, cSrv6, cSrv7, cSrv10, cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6 |
| 2: Data Sets                 |  | cDs1, cDs2, cDs5, cDs6, cDsN1a, cDsN1b   |
| 2+: Data Set Definition      |  | cDs10, cDs12, cDs13, cDsN10a, cDsN11   |
| 3: Substitution              | cSub1, cSub3   | cSub2  |
| 4: Setting Group Selection   | cSg2, cSgN1  | cSg1   |
| 5: Unbuffered Reporting      | cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp19, cRpN2, cRpN5, cRpN6               | cRp1, cRp2, cRp7, cRp16, cRp18, cRpN1  |
| 6: Buffered Reporting        | cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr19, cBr30, cBr31, cBrN2, cBrN5, cBrN6 | cBr1, cBr2, cBr7, cBr16, cBr18, cBr32, cBr33, cBrN1  |
| 12a: Direct Control          | cCtl4, cCtl5, cDOns1, cDOns2   | cCtl2  |
| 12b: SBO Control             | cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3  | cCtl2, cSBOns4   |
| 12c: Enhanced Direct Control | cCtl4, cCtl5, cDOes1, cDOes2   | cCtl2  |
| 12d: Enhanced SBO Control    | cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3  | cCtl2, cSBOes4   |
| 13: Time sync                | cTm1, cTmN1  | cTm2   |
| 14: File transfer            | cFt1, cFt3, cFtN1  |  |