

No. 10157161-INC 19-2825

Issued to:

Sprecher Automation GmbH
Franckstraße 51
4020 Linz
Austria

For the client system:

SPRECON-E-C
PAC IED (Gateway, SC, BC)
Firmware version: 8.64
S/N: 202.134/G007

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 for power utility automation

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 1.1.1 with product's protocol, model and technical issue implementation conformance statements: "SPRECON-E IEC 61850 - Edition 2 Protocol Implementation Conformance Statement Server + Client, doc.nr. 94.2.918.80 Issue E", "SPRECON-E IEC 61850 - Edition 2 Model Implementation Conformance Statement MICS - Client, doc.nr. 94.2.918.85 Issue A" and "SPRECON-E IEC 61850 - Edition 2 Tissues Implementation Conformance Statement Server + Client, doc.nr. 94.2.918.86 Issue E" and the extra information for testing: "SPRECON-E Protocol Implementation Extra Information For Testing PIXIT Client, doc.nr. 94.2.918.83 Issue A".

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 (14/24)	12a Direct Control (5/9)
2+ Data Set Definition (3/8)	12c Enhanced Direct Control (5/9)
4 Setting Group Selection (2/3)	12d Enhanced SBO Control (7/11)
5 Unbuffered Reporting (21/24)	13 Time Synchronization (4/4)
6 Buffered Reporting (22/28)	14 File Transfer (3/8)

This certificate includes a summary of the test results as carried out at DNV GL in the Netherlands with UniCA 61850 IED simulator 6.1.31 and UniCA 61850 Analyzer 5.34.01. This document has been issued for information purposes only, and the archived of the DNV GL verification report No. 10157161-INC 19-2824 will prevail.

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

Arnhem, August 28, 2019



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

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 1.1.1

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7, cSrv5, cSrv6, cSrv10, cSrvN4, cSrvN5, cSrvN6
2+: Data Set Definition		cDs11, cDs14, cDsN10b
4: Setting Group	cSg2, cSgN1	
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp19, cRpN2, cRpN5, cRpN6	cRp2, cRp6, cRp7, cRp12, cRp13b, cRp16, cRp18
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr19, cBr30, cBr31, cBrN2, cBrN5, cBrN6	cBr2, cBr6, cBr7, cBr16, cBr18, cBr32
12a: Direct Control	cCtl4, cCtl5, cDOs1, cDOs2	cCtl2
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl2
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl2, cSBOes4
13: Time Synchronization	cTm1, cTmN1	cTm2, cTmN2
14: File Transfer	cFt1, cFt3, cFtN1	