

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

No. 10148703-INC 20-2443

Issued to: NovaTech LLC 13555 W 107th St Lenexa KS 66215 USA For the client system: OrionLX+ Automation Platform Software version: 9.4.8 Serial number: 121003

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 1.1.2 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 Client interface in NovaTech Orion, version 9.4.8 Date: July 22, 2020", "Model Implementation Conformance Statement for the IEC 61850 Client interface in NovaTech Orion, version 9.4.8 Date: July 22, 2020", "Model Implementation Conformance Statement for the IEC 61850 Client interface in NovaTech Orion Version 9.4.8 Date: July 10, 2020" and "TISSUEs Implementation Conformance Statement (TICS) For the IEC 61850 Edition 2 Client and Server interface in NovaTech Orion Version 9.4.8 Date 13-July-2020" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client interface in NovaTech Orion Version 9.4.8 Date: July 27, 2020".

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 2 5 6	Basic Exchange (16/24) Data Sets (6/10) Unbuffered Reporting (19/24) Buffered Reporting (23/28)	<ul> <li>12a Direct Control (7/9)</li> <li>12b SBO Control (8/11)</li> <li>12c Enhanced Direct Control (7/9)</li> <li>12d Enhanced SBO Control (8/11)</li> </ul>
0	Bullered Reporting (23/28)	13 Time Synchronization (3/4)

This certificate includes a summary of the test results as carried out at DNV GL in the Netherlands with UniCA 61850 IED Simulator version 6.1.31 and UniCA 61850 Analyzer version 5.34.01. This document has been issued for information purposes only, and the archived DNV GL report No. 10148703-INC 20-2442.Rev3 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by NovaTech. 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, July 29, 2020

N. Heijker Business Leader Interoperability of smart power systems

Issued by:





 $^{1}\,\mbox{Level}\,\mbox{A}$  - Independent test lab with certified ISO 9001 Quality System

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DNV GL Netherlands B.V.				
Utrechtseweg 310-B50, 6812 AR ARNHEM, The Netherlands	Tel . +31 26 356 9111			
P.O. Box 9035, 6800 ET ARNHEM, The Netherlands	Fax. +31 26 351 3683			

www.dnvgl.com contact@dnvgl.com

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Applicable Test Procedures from the UCA International Users Group Edition 2 Client Conformance Test Procedures version 1.1.2

Conformance Block		Mandatory	Conditional
1:	Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7
			cSrv1, cSrv5, cSrv6, cSrv7, cSrv10, cSrvN3, cSrvN4, cSrvN5
2:	Data Sets		cDs1, cDs2, cDs5, cDs6, cDsN1a, cDsN1b
5:	Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp19, cRpN2, cRpN5, cRpN6	cRp2, cRp6, cRp7, 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, cBr33
12a	: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2, cCtl3
12b	: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3	cCtl1, cCtl2, cCtl3
12c:	Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl1, cCtl2, cCtl3
12d	: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2, cCtl3
13:	Time sync	cTm1, cTmN1	cTm2