

**Issued to:**  
GE Multilin  
650 Markland St.  
Markham, Ontario  
Canada L6C 0M1



**For the client product:**  
Multilin G500  
Advanced Substation Gateway  
Firmware version: G500 v2.10  
IEC 61850 client application version:  
NTEK-A027-0 iec61850dca Ver.100  
Hardware version: G500-B

The client product 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 Test Procedures version 1.1.2 (rev2) with product's protocol, model and technical issue implementation conformance statements: "IEC 61850 Client (DCA) for MCP Conformance Statement NTEK-A027M-0CS, Version 2.00 Revision 3, Associated Software Release version 2.10, Chapter 1 PICS", "IEC 61850 Client (DCA) for MCP Conformance Statement NTEK-A027M-0CS, Version 2.00 Revision 3, Associated Software Release version 2.10, Chapter 2 MICS", "IEC 61850 Client (DCA) for MCP Conformance Statement NTEK-A027M-0CS, Version 2.00 Revision 3, Associated Software Release version 2.10, Chapter 4 TICS" and extra information for testing "IEC 61850 Client (DCA) for MCP Conformance Statement NTEK-A027M-0CS, Version 2.00 Revision 3, Associated Software Release version 2.10, Chapter 3 PIXIT".

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 (17/24)	12a	Direct Control (6/9)
2	Data Sets (6/10)	12b	SBO Control (7/11)
2+	Data Set Definition (5/8)	12c	Enhanced Direct Control (6/9)
5	Unbuffered Reporting (21/24)	12d	Enhanced SBO Control (7/11)
6	Buffered Reporting (24/28)	13	Time Synchronization (3/4)
		14	File Transfer (3/8)

This certificate includes a summary of the test results as carried out at Grid Automation Laboratories in UK Grid Solutions Limited in Stafford, United Kingdom with DNV GL UniCA IED Simulator version 6.1 and the DNV GL UniCA 61850 Analyzer version 5.36. This document has been issued for information purposes only, and the original paper copy of the Grid Automation Laboratories report: No. 50745.6G500.301 will prevail.

The tests have been carried out on one single specimen of the product as referred and submitted to Grid Automation Laboratories by GE Multilin. The manufacturer's production process has not been assessed. This certificate does not imply Grid Automation Laboratories at UK Grid Solutions Limited has certified or approved any other product other than the specimen tested.

Stafford, 07-Jan-2021

Allen Millard   
Grid Automation Laboratories Manager

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IED Communication Test Engineer

<sup>1</sup> Level B - Test lab with certified ISO 9001 Quality System



# IEC 61850 Certificate Level B

No. 50745.6G500.801

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Applicable Test Procedures from the UCA International Users Group Edition 2 Client Test Procedures version 1.1.2(rev2)

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7 cSrv4, cSrv5, cSrv6, cSrv7 cSrvN1, cSrvN3, cSrvN4, cSrvN5, cSrvN6
2: Data Sets		cDs2, cDs3, cDs5, cDs6, cDsN1b, cDsN1c
2+: Data Set Definition		cDs10, cDs12, cDs13, cDsN10a, cDsN11
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp19, cRpN2, cRpN5, cRpN6	cRp2, cRp6, cRp7, Rp12, cRp13b, cRp16, cRpN1
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr19, cBr30, cBr31, cBrN2, cBrN5, cBrN6	cBr2, cBr6, cBr7, cBr12, cBr13b, cBr16, cBr33, cBrN1
12a: Direct control	cCtl4, cCtl5 cDOs1, cDOs2	cCtl1, cCtl2
12b: SBO control	cCtl4, cCtl5 cSBOs1, cSBOs2, cSBOs3	cCtl1, cCtl2
12c: Enhanced Direct Control	cCtl4, cCtl5 cDOes1, cDOes2	cCtl1, cCtl2
12d: Enhanced SBO Control	cCtl4, cCtl5 cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2
13: Time sync	cTm1, cTmN1	cTm2
14: File transfer	cFt1, cFt3, cFtN1	

