



IEC 61850 Certificate Level B¹

No. 50745.6MM300.801

issued to:

GE Renewable Energy St. Leonards Building, Harry Kerr Drive Stafford, UK, ST16 1WT

For the server product:

MM300 Enhanced Motor Management System Firmware Version: 2.0 IEC 61850 Version: 2.0 Hardware Version: A

Issued by:

Grid Automation Laboratories, UK Grid Solutions Limited

The server 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 Server Test Procedures version 2.0.5 with product's protocol, model and technical issue implementation conformance statements: "MM300 Enhanced Motor Management System PICS, GET-20109", "MM300 Enhanced Motor Management System TICS, GET-20108" and extra information for testing "MM300 Enhanced Motor Management System PIXIT, GET-20110".

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):

2	Basic Exchange (22/26) Data Sets (4/7) Unbuffered Reporting (20/23)	13	Direct Control (4/19) Time Synchronization (5/7) File Transfer (5/8)	J 12000. 3200
	Buffered Reporting (28/33)	-		
9a	GOOSE Publish (12/13)	5		Introduce a confi
9b	GOOSE Subscribe (20/20)			

This certificate includes a summary of the test results as carried out at Stafford, United Kingdom with UniGrid SA version 2.0.1 with test suite ED2_Server_TP2.0.5_Amd1TP1.1_v1.1.1 and UniCA 61850 Analyzer version 6.40. This document has been issued for information purposes only, and the original paper copy of the Grid Automation Laboratories report: No. 50745.6MM300.301 will prevail.

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

Stafford, 10 June 2022

Allen Millard Grid Automation Laboratories Manager

Hua Qin Grid Automation Laboratories Test Engineer

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 $^{^1}$ Level B - Test lab with certified ISO 9001 Quality System. UCA Users Group, P.O. Box 315, Shell Knob, MO 65747, USA





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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 2.0.5.

Conformance Block	Mandatory	Conditional	
1: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrv8, sSrvN1abcdf, sSrvN4	sAssN6, sSrv6, sSrv9, sSrv10, sSrvN1e, sSrvN3	
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15	
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, sRp15, sRp17, RpN5	
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr16, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBr29, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr8, sBr10, sBr11, sBr12, sBr15, sBr17	
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop2b, sGop6, sGopN1, sGopN2	
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGos8, sGos9, sGos10, sGos11, sGos12, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos4, sGos6b, sGos13	
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2		
13: Time sync	sTm1, sTm2, sTmN1	sTm3, sTm5	
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab		