

IEC 61850 Certificate Level A¹

Issued to:

Fundamentals Ltd
Unit 2, Hillmead Enterprise Park
Marshall Road, Swindon
Wiltshire, SN5 5FZ
United Kingdom

For the server product:

SuperTAPP SG
Voltage Control & Monitoring Relay
Main software version: 9.4
Communication software version: 29
S/N: SN1034-201712-0005

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: "SuperTAPP SG Voltage Control & Monitoring Relay, IEC 61850: Protocol Information Conformance Statement (PICS), FP1034-U-20 SuperTAPP SG PICS v2.0, date 03/03/2022", "SuperTAPP SG Voltage Control & Monitoring Relay, IEC 61850: Model Implementation Conformance Statement (MICS), FP1034-U-21 SuperTAPP SG MICS v2.0, Date 03/03/2022" and "SuperTAPP SG Voltage Control & Monitoring Relay, IEC61850: Tissues conformance statement (TICS), FP1034-U-23 SuperTAPP SG TICS v1.0, Date 03/03/2022" and the extra information for testing: "SuperTAPP SG Voltage Control & Monitoring Relay, IEC 61850: Protocol Implementation eXtra Information for Testing (PIXIT), FP1034-U-22 SuperTAPP SG PIXIT v2.0, Date 03/03/2022".

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 (21/26)	9a GOOSE Publish (11/13)
2 Data Sets (4/7)	12a Direct Control (5/18)
2+ Data Set Definition (24/24)	13 Time Synchronization (4/7)
5 Unbuffered Reporting (21/23)	14 File Transfer (5/8)
6 Buffered Reporting (29/33)	

This certificate includes a summary of the test results as carried out at Fundamentals Ltd in United Kingdom with UniGrid SA Simulator 2.0.1 with test suite 20220215 and UniCA 61850 Analyzer 6.40.01. This document has been issued for information purposes only, and the archived DNV verification report No. 10328222-DSO 22-2678 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 Fundamentals Ltd. 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, March 4, 2022



G. Akse
Business Development Manager
Interoperability of Smart Power Systems

Issued by:




R. Schimmel
Verification Manager

¹ Level A - Independent test lab with certified ISO 9001 Quality System
UCA International 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, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv9, sSrvN1e, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
2+: Data Set Definition	sDs2, sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs9, sDs13, sDs14, sDsN1cd, sDsN2, sDsN3, sDsN4, sDsN5, sDsN6, sDsN7, sDsN8, sDsN9, sDsN10	sDs11, sDs12, sDsN11, sDsN12
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRp15, sRpN5
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	sBr6, sBr7, sBr8, sBr10, sBr11, sBr12, sBr15
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop6, sGopN1, sGopN2
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl16
13: Time sync	sTm1, sTm2, sTmN1	sTm5
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	