

IEC 61850 Certificate Level A¹

Issued to:

Prosoft-Systems Ltd.
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Russian Federation

For the server product:

ARIS-2305 Protection, Automation, Measurement IED
IEC 61850 version: 1.0.1.4
Software version: 1.9.159.44220 /M1.9
S/N: 09200093

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: "Protocol Implementation Conformance Statement (PICS) for the IEC 61850 Edition 2 server interface in ARIS-23XX, ARIS-42XX, ARIS-22XX, ARIS-28XX, ARIS-EM4x, Version 1.0 Date 30.06.2021", "Model Implementation Conformance Statement (MICS) for the IEC 61850 Edition 2 server interface in ARIS-23XX, ARIS-42XX, ARIS-22XX, ARIS-28XX, ARIS-EM4x, Version 1.0 Date 30.06.2021" and "TISSUES Implementation Conformance Statement (TICS) for the IEC 61850 Edition 2 server interface in ARIS-23XX, ARIS-42XX, ARIS-22XX, ARIS-28XX, ARIS-EM4x, Version 1.0 Date 30.06.2021" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Edition 2 server interface in ARIS-23XX, ARIS-42XX, ARIS-22XX, ARIS-28XX, ARIS-EM4x, Version 1.0 Date 30.06.2021".


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 (24/26)	9a GOOSE Publish (11/13)
2 Data Sets (4/7)	9b GOOSE Subscribe (20/20)
2+ Data Set Definition (24/24)	12a Direct Control (8/18)
3 Substitution (3/3)	12c Enhanced Direct Control (9/20)
4 Setting Group Selection (4/4)	12d Enhanced SBO Control (16/28)
4+ Setting Group Definition (13/13)	13 Time Synchronization (4/7)
5 Unbuffered Reporting (22/23)	14 File Transfer (6/8)
6 Buffered Reporting (32/33)	

This certificate includes a summary of the test results as carried out at NTC FSK UES in Moscow, Russia with UniGrid SA Simulator 1.8.1 with test suite 20210930.1 and UniCA 61850 Analyzer 6.40.01. This document has been issued for information purposes only, and the archived DNV verification report No. 10320627-DSO 21-3579 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 Prosoft-Systems 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, December 2, 2021



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 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, sSrv10, sSrv12, sSrvN1e, sSrvN2, 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
3: Substitution	sSub1, sSub2, sSub3	
4: Setting Group Selection	sSg1, sSg3, sSgN1	sSg11
4+: Setting Group Definition	sSg2, sSg4, sSg6, sSg7, sSg8, sSg10, sSg12, sSgN2, sSgN3, sSgN4, sSgN5	sSg5, sSg9
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRp13, 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, sBr13, sBr15, sBr23, sBr24
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, 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, sDOs1, sDOs2	sCtl7, sCtl15, sCtl16, sCtl18
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl7, sCtl14, sCtl15, sCtl16, sCtl18
12d: Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl6, sCtl7, sCtl15, sCtl16, sCtl18, sCtl26
13: Time sync	sTm1, sTm2, sTmN1	sTm3
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt3

All configuration file and data model tests have been successfully performed for the product variants using the same communication hardware and software version:

- ARIS-2205 Bay controller
- ARIS-2805 Multifunctional controller (RTU)
- ARIS-4208 Protection, Automation, Measurement IED, DMU
- ARIS-EM45 Digital multifunctional energy meter