

IEC 61850 Certificate Level A¹

No. 10072071-INC 17-2966

Issued to:

OOO "SVEY" (Свей) Lunacharsky st., 240/1, office 7 620026 Ekaterinburg Russian Federation

For the server product:

AURA-07-R (АУРА-07-Р) Disturbance Recorder

IEC61850 Software version: 0.2.2.35 Hardware version: SVE.03.1102

S/N: 0311020040-2017

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 1.0 with TPCL² 1.2.4 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in AYPA-07, ver. 1", "Model Implementation Conformance Statement for the IEC 61850 interface in AYPA-07, ver. 1" and "TISSUES Implementation Conformance Statement for the IEC 61850 interface in AYPA-07 ver. 1" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in AYPA-07, ver. 1".

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)	9b GOOSE Subscribe (12/14)
2 Data Sets (4/7)	12a Direct Control (5/18)
5 Unbuffered Reporting (20/21)	13 Time Synchronization (4/7)
	14 File Transfer (7/8)

This certificate includes a summary of the test results as carried out at NTC FSK UES in the Russian Federation with UniGrid SA 1.4.532.11 with test suite 1.0.50 and UniCA 61850 Analyzer 5.31.00. This document has been issued for information purposes only, and the original paper copy of the DNV GL verification report No. 10072071-INC 17-2965 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by "SVEY". 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, December 14, 2017

Issued by:

Business Leader

Intelligent Networks and Communication

DNV-GL

R. Schimmel \
Verification Manager

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¹ Level A - Independent test lab with certified ISO 9001 Quality System

² TPCL - Test procedures change list



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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL 1.2.4

Conformance Block		Mandatory	Conditional
1:	Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv8, sSrvN1e, sSrvN1f, sSrvN2, sSrvN3
2:	Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
5:	Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRpN5
9b:	GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	
12a:	Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl2
13:	Time sync	sTm1, sTm2, sTmN1	sTm3
14:	File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFtN1c