IEC 61850 Certificate Level A[1]

Issued to:

Prompribor Plant Limited
8 Lakina St, room 59
Vladimir, Vladimir Region
Russian Federation

For the server product:
SM160-02M/D (SM160-02М/Д)
Intelligent Controller
Software version: 1.9.2.3144
Hardware version: VLST 340.00.000.02M (ВЛСТ 340.00.000.02M)
S/N: 030107

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 2.0.4 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in SM160, Date 12.02.2021", "Model Implementation Conformance Statement for the IEC 61850 interface in SM160, Date 12/02/2021" and "TISSUES Implementation Conformance Statement for the IEC 61850 Ed2 interface in SM160, Date 12.02.2021" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 server interface in SM160, Date February 12, 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 (21/26)		9a	GOOSE Publish (12/13)
2	Data Sets (4/7)		9b	GOOSE Subscribe (18/20)
2+	Data Set Definition (24/24)		12a	Direct Control (7/18)
5	Unbuffered Reporting (22/23)		13	Time Synchronization (3/7)
6	Buffered Reporting (30/33)			

This certificate includes a summary of the test results as carried out at NTC FSK UES in the Russian Federation with UniGrid SA Simulator 2.0.0 with test suite 20211115.1 and UniCA 61850 Analyzer 6.41. This document has been issued for information purposes only, and the archived DNV verification report No. 10320627-INC 21-3504 rev 4 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV by Prompribor Plant Limited. 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 3, 2021

N.A. Heijker
Business Leader
Interoperability of Smart Power Systems

Issued by:

DNV

R. Schimmel
Verification Manager

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

IEC 61850 Certificate Level A

Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 2.0.4

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, 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
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
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop5, sGop6, sGopN1, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGos8, sGos9, sGos10, sGos11, sGos12, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos6b
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl16, sCtl17, sCtl18
13: Time sync	sTm1, sTm2, sTmN1	