

IEC 61850 Certificate Level A¹

Issued to:

Engineering Center Energoservice
44, Aviamotornaya street, Bld 1
Office 1A, Room 1
Moscow, 111024
Russian Federation

For the server product:

ENIP-2-45/100-220-A2E4x2-21
(ЭНИП-2-45/100-220-A2E4x2-21)
Multifunctional measuring transducer
With IO Module ENMV-1 (ЭНМВ-1)
Firmware version: 2.8.0.9
Hardware version: 5.1
Serial number: 90320

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 and extra information for testing: "Multifunctional measuring transducer ENIP-2 IEC 61850 Conformance Statement Rev. 10.2021".


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 (18/26) | 9a GOOSE Publish (12/13) |
| 2 Data Sets (4/7) | 9b GOOSE Subscribe (18/20) |
| 2+ Data Set Definition (24/24) | 12a Direct Control (6/18) |
| 5 Unbuffered Reporting (19/23) | 12d Enhanced SBO Control (15/28) |
| 6 Buffered Reporting (27/33) | 13 Time Synchronization (3/7) |

This certificate includes a summary of the test results as carried out at DNV in The Netherlands with UniGrid SA Simulator 1.8.1 with test suite Ed2_Server_TP_2.0_20211006.1 and UniCA 61850 Analyzer 6.41. This document has been issued for information purposes only, and the archived DNV verification report No. 10311750-INC 21-3367 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 Engineering Center Energoservice. 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, October 20, 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

IEC 61850 Certificate Level A

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, sSrv12 |
| 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, sRp10, sRp15, sRp17, 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, sBr10, sBr15, sBr17 |
| 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 | sGos13 |
| 12a: Direct control | sCtl5, sCtl10, sDOns1, sDOns2 | sCtl15, sCtl16 |
| 12d: Enhanced SBO Control | sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8 | sCtl6, sCtl7, sCtl15, sCtl16, sCtl26 |
| 13: Time sync | sTm1, sTm2, sTmN1 | |