IEC 61850 Certificate Level A[1]

Issued to:

Arteche/SAC
Derio Bidea 28, Zabalondo Industrialdea
48100 Mungia, Bizkaia
Spain

For the server product:

saTECH SCU-HMI 122
Station Control Unit
IEC 61850 version: V.2.1.2
S/N: 2100598204

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 for the IEC 61850 interface in saTECH SCU-HMI 122; November 25, 2021", "Model Implementation Conformance Statement for the IEC 61850 interface in saTECH SCU-HMI 122; November 25, 2021" and "TISSUES Implementation Conformance Statement for the IEC 61850 Edition 2 interface in saTECH SCU-HMI 122;November 25, 2021" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Edition 2 server interface in saTECH SCU-HMI 122; November 25, 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 (19/26)		12a	Direct Control (7/19)
2	Data Sets (4/7)		12b	SBO Control (13/28)
5	Unbuffered Reporting (20/23)		12c	Enhanced Direct Control (9/21)
6	Buffered Reporting (28/33)		12d	Enhanced SBO Control (14/29)
9a	GOOSE Publish (11/13)		13	Time Synchronization (5/7)

This certificate includes a summary of the test results as carried out at DNV in Spain with UniGrid SA Simulator 1.8.1 with test suite 20210830.2 and UniCA 61850 Analyzer 6.40.01. This document has been issued for information purposes only, and the archived DNV verification report No. 10301316-INC 21-3540 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 Arteche/SAC. 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, November 25, 2021
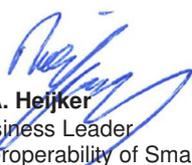
Issued by:

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

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, sSrvN1abcdf, sSrvN4	sAssN6, sSrv9, sSrv10
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, 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	sBr8, sBr10, sBr11, sBr12, sBr15, sBr17
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop6, sGopN1, sGopN2
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl7, sCtl13, sCtl16
12b: SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl6, sCtl7, sCtl16, sCtl27
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl7, sCtl13, sCtl14, sCtl16, sCtl26
12d: Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl6, sCtl7, sCtl16, sCtl26
13: Time sync	sTm1, sTm2, sTmN1	sTm5, sTmN2