



IEC 61850 Certificate Level A¹

Issued to:

Prolan Power Zrt Szentendrei út 1-3 2011 Budakalász Hungary For the server product:

ProField-HE Substation Automation Gateway

Software image: IMG 2.0.0 IEC 61850 version: SAG 4.0.0

S/N: 110009/2021

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 (PICS) for the IEC 61850 Edition 2 server interface in ProField-HE, date 2021-04-30", "Model Implementation Conformance Statement (MICS) for the IEC 61850 Edition 2 server interface in ProField-HE, date 2021-04-30" and "TISSUEs Implementation Conformance Statement (TICS) for the IEC 61850 Edition 2 server interface in ProField-HE, date 2021-04-30" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Edition 2 server interface in ProField-HE, dated 2021-04-30".

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)
- 2 Data Sets (4/7)
- 5 Unbuffered Reporting (21/23)
- 6 Buffered Reporting (29/33)
- 9a GOOSE Publish (11/13)
- 9b GOOSE Subscribe (19/20)

- 12a Direct Control (4/19)
- 12b SBO Control (14/28)
- 12c Enhanced Direct Control (8/21)
- 12d Enhanced SBO Control (17/29)
- 13 Time Synchronization (5/7)
- 14 File Transfer (8/8)
- 15 Service Tracking (6/17)

This certificate includes a summary of the test results as carried out at DNV in The Netherlands with UniGrid SA Simulator 1.8.0 with test suite 20210330 and UniCA 61850 Analyzer 6.40.01. This document has been issued for information purposes only, and the archived DNV verification report No. 10280174-INC 21-2888 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 Prolan. 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, June 2, 2021

N.A. Heijker

Issued by:

Business Leader Interoperability of Smart Power Systems DNV

R. Schimmel
Verification Manager

Copyright © DNV Netherlands B.V. Arnhem, the Netherlands. All rights reserved. It is prohibited to update or change this certificate in any manner whatsoever, including but not limited to dividing it into parts.

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, sSrv12
2:	Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
5:	Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, 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, sBr15
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	sGos6b, sGos13
12a:	Direct control	sCtl5, sCtl10, sDOns1, sDOns2	
12b:	SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl4, sCtl6, sCtl15, sCtl16, sCtl17
12c:	Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl14, sCtl15, sCtl16, sCtl17
12d:	Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4, sCtl6, sCtl7, sCtl15, sCtl16, sCtl17, sCtl26
13:	Time sync	sTm1, sTm2, sTmN1	sTm5, sTmN2
14:	File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFt3, sFtN1c
15:	Service tracking		sTrk1, sTrk2, sTrk4, sTrk8, sTrk9, sTrk11