IEC 61850 Certificate Level A[1]

Issued to:

Schneider Electric Industries SAS
35 rue Joseph Monier
92500 Rueil Malmaison
France

For the server product:

PowerLogic™ P7 Protection and Control Device
Firmware version: V02.001
S/N: WX221110005

The server product has not been shown to be non-conforming to:

IEC 61850 Edition 2 with Amendment 1 Parts 6, 7-1, 7-2, 7-3, 7-4, 8-1

Communication networks and systems for power utility automation

The conformance test has been performed according to IEC 61850-10 and the UCA International Users Group Edition 2 with Amendment 1 Server Test Procedures version 1.2 with product's protocol, model and tissues implementation conformance statements: Protocol Implementation Conformance Statement (PICS) for the IEC 61850 Edition 2 Amendment 1 Server Interface in the PowerLogic™ P7 Protection and Control Device, version P7/EN CM/22A, date 12/2023", "PowerLogic™ P7 Protection and Control Device Model Implementation Conformance Statement (MICS), version: P7/EN CM/22A, date 12/2023", "TISSUEs Implementation Conformance Statement (TICS) for the IEC 61850 Edition 2 Amendment 1 Server Interface in the PowerLogic™ P7 Protection and Control Device, version P7/EN CM/22A, date 11/2023" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Edition 2 Amendment 1 Server Interface in the PowerLogic™ P7 Protection and Control Device, version P7/EN CM/22A, date 12/2023".

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):

1a Basic Exchange (26/29)	12a Direct Control (8/18)
2 Data Sets (4/7)	12c Enhanced Direct Control (12/20)
2+ Data Set Definition (24/24)	12d Enhanced SBO Control (18/28)
4 Setting Group Selection (5/5)	13a Time Synchronization with SNTP (8/8)
4+ Setting Group Definition (14/14)	13b Time Synchronization with PTP (4/4)
5 Unbuffered Reporting (26/26)	14 File Transfer (7/8)
6 Buffered Reporting (36/36)	15 Service Tracking (8/17)
9a GOOSE publish (12/13)	
9b GOOSE subscribe (27/27)	

This certificate includes a summary of the test results as carried out at Schneider Electric in China with UniGrid SA Simulator 2.2.1 with test suite 20231116.1 and UniCA 61850 Analyzer 6.41.0. This attestation has been issued for information purposes only, and the archived DNV verification report No. 10369020-DSO 23-3103 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 Schneider Electric. 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 15, 2023

G. Akse
Business Development Manager
Interoperability of Power Systems

Issued by:

DNV

R. Schimmel
Verification Manager

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

UCA International Users Group P.O. Box 315, Shell Knob, MO 65747 USA

IEC 61850 Certificate Level A

Applicable Server Test Procedures from the UCA International Users Group Edition 2 with Amendment 1 Server Test Procedures version 1.2

Conformance Block	Mandatory	Conditional
1a: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrv8, sSrvN1abcdf, sSrvN4	sAssN6, sSrv6, sSrv9, sSrv10, sSrv12, sSrv13, sSrv15, 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
4: Setting Group Selection	sSg1, sSg3, sSgN1	sSg11, sSg13
4+: Setting Group Definition	sSg2, sSg4, sSg6, sSg7, sSg8, sSg10, sSg12, sSgN2, sSgN3, sSgN4, sSgN5	sSg5, sSg9, sSg14
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRp23, sRpN1, sRpN2, sRpN3, sRpN4, sRpN5, sRpN7, sRpN8, sRpN9	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRp13, sRp15, sRp17
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr16, sBr20, sBr21, sBr22, sBr23, sBr24, sBr25, sBr26, sBr27, sBr28, sBr29, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN7, sBrN8, sBrN9, sBrN10	sBr6, sBr7, sBr8, sBr10, sBr11, sBr12, sBr13, sBr15, sBr17
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop2b, sGop6, sGopN1, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGos8, sGos9, sGos10, sGos11, sGos12, sGos14, sGos15, sGos20, sGos21, sGos22, sGos23, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6, sGosN7	sGos4, sGos6b, sGos13
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl15, sCtl16, sCtl17, sCtl18
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl7, sCtl13, sCtl14, sCtl15, sCtl16, sCtl17, sCtl18, sCtl26
12d: Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4, sCtl6, sCtl7, sCtl15, sCtl16, sCtl17, sCtl18, sCtl26
13a: Time sync SNTP	sTm1, sTm2, sTm7, sTmN1	sTm3, sTm4, sTm5, sTmN2
13b: Time sync PTP	sTmP1, sTmP2, sTmPN1	sTmP5
14: File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFtN1c
15: Service tracking		sTrk1, sTrk2, sTrk4, sTrk7, sTrk8, sTrk9, sTrk10, sTrk11