

No. 10250718-INC 21-2691

Issued to:

Schneider Electric España, S.A.
C/ Charles Darwin s.n.
(Edificio Bogaris)
41092 Sevilla
Spain

For the server product:

Saitel DP: SM_CPU866e with SM-DI32, SM_DO16R, and SM_AI16
Remote Terminal Unit & Gateway with high performance CPU, digital inputs, digital outputs, and analog inputs module

Module:	SW version:	S/N:
SM_CPU866e	11.06.20_2102111515	2019R1576549
SM_DI32	-	2023R1578095
SM_DO16R	-	2025R1579078
SM_AI16	-	2012R1574025

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_rev6 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 Ed.2 Server Interface in SAITEL DP; v5, March 14, 2021", "Model Implementation Conformance Statement for the IEC 61850 interface in Saitel DP; v3, March 5, 2021" and "TISSUES Implementation Conformance Statement (TICS) For the IEC Edition 2 61850 Server interface in Saitel DP; v6, March 8, 2021" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Edition 2 SERVER interface in Saitel DP and DR; v13, March 14, 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 (21/28)	12a Direct Control (7/17)
2 Data Sets (4/7)	12b SBO Control (14/26)
5 Unbuffered Reporting (19/22)	12c Enhanced Direct Control (8/19)
6 Buffered Reporting (27/32)	12d Enhanced SBO Control (16/27)
9a GOOSE Publish (11/13)	13 Time Synchronization (3/7)
9b GOOSE Subscribe (17/18)	

This certificate includes a summary of the test results as carried out at DNV GL in Spain with UniGrid SA Simulator 1.7.1 with test suite IEC61850ServerTP_2.0.1-v1.1.0 and UniCA 61850 Analyzer 5.34.02. This document has been issued for information purposes only, and the archived DNV GL verification report No. 10250718-INC 21-2690 Rev 0 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by Schneider. The manufacturer's production process has not been assessed. This certificate does not imply that DNV GL has approved any product other than the specimen tested.

Arnhem, March 15, 2021


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

Issued by:



DNV KEMA is now DNV GL


R. Schimmel
Verification Manager

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

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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 2.0_rev6

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv8, sSrv9, sSrv10, sSrv12, sSrvN1f
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, 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
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, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos4
12a: Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl7, sCtl15, sCtl16
12b: SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl4, sCtl6, sCtl7, sCtl15, sCtl16
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl7, sCtl14, sCtl15, sCtl16
12d: Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4, sCtl6, sCtl7, sCtl15, sCtl16, sCtl26
13: Time sync	sTm1, sTm2, sTmN1	