

Issued to:

Siemens AG
Wernerwerkdammm 5
13629 Berlin
Germany

For the 9-2LE publisher:

SIPROTEC 5 6MU85 Merging Unit / Bay Unit
with ETH-BD-2FO Module
Firmware version: V08.30
S/N: BM2004000483
Supporting:
4 phase voltage and current
Neutral is measured

The 9-2LE publisher has not been shown to be non-conforming to:

IEC 61850 First Edition Parts 6, 7-2, and 9-2

Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10 and the UCA International Users Group "Test Procedures version 1.1 for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2 (9-2LE version 2.1)" with TPCL² version 1.1 with 9-2LE publisher's protocol implementation conformance statement: "SIPROTEC 5 PIXIT, PICS, TICS IEC 61850 V8.30 and higher, document version C53000-G5040-C013-8, Edition 08.2020".

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):

11a Sampled Value publish (13/17)	50 Hz with 80 samples per cycle
11a Sampled Value publish (13/17)	60 Hz with 80 samples per cycle
11a Sampled Value publish (13/17)	50 Hz with 256 samples per cycle
11a Sampled Value publish (13/17)	60 Hz with 256 samples per cycle

This certificate includes a summary of the test results as carried out at DNV GL in the Netherlands with UniCA 61850 Analyzer 61850 version 5.34.02. This document has been issued for information purposes only, and the archived DNV GL report No. 10204655-INC 20-2796 Rev2 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by Siemens AG. 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, August 26, 2020



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

² TPCL - Test procedures change list

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Applicable Test Procedures from the UCA International Users Group Test procedures version 1.1 for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2 (9-2LE version 2.1)" with TPCL version 1.1.

Conformance Block	Mandatory	Conditional
Configuration	Cnf1, Cnf2, Cnf3, Cnf4, Cnf5, Cnf6, Cnf7, Cnf8	
11a Sampled Value Publishing 50 Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14	Svp4, Svp8, Svp12, Svp13, Svp15, Svp16
11a Sampled Value Publishing 60Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14	Svp4, Svp8, Svp12, Svp13, Svp15, Svp16
11a Sampled Value Publishing 50Hz, 256 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14	Svp5, Svp9, Svp12, Svp13, Svp15, Svp16
11a Sampled Value Publishing 60Hz, 256 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14	Svp5, Svp9, Svp12, Svp13, Svp15, Svp16