

No. 10013812-OPE/INC 16-1829

Issued to:

Doble Engineering Company
85 Walnut Street
Watertown, MA 02472
USA

For the 92LE publisher:

F6150sv
Power system simulator
Software version: 5.6.1
S/N: 111406241
Supporting:
3 phase voltage and current
Neutral is calculated or measured

The 92LE 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 UCAIUG "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 92LE publisher's protocol implementation conformance statement: "Protocol Implementation Conformance Statement for the IEC 61850 interface in F6150sv" and extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in F6150sv".

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 (11/17)	50 Hz with 80 samples per cycle
11a Sampled Value publish (11/17)	60 Hz with 80 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 5.31.00. This document has been issued for information purposes only, and the original paper copy of the DNV GL test report No. 10013812-OPE/INC 16-1830 will prevail.

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

Arnhem, March 30, 2016



M. Adriaensen
Head of Department
Operational Excellence

Issued by:




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 UCAIUG: 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, Svp7, Svp8, Svp16
11a Sampled Value Publishing 60Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14	Svp4, Svp7, Svp8, Svp16