



IEC 61850 Certificate Level A¹

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Issued to:
Interoptix Inc.
19821 Graystone Ln.
San Jose, CA 95120
USA

No. 74101671-MOC/INC 12-01164

For the 92LE publisher:
SAMU-IX merging unit for protection
Hardware version 02
Firmware version 3.2
Supporting:
3 phase voltage and current
Neutral is either calculated or measured



Issued by:

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

IEC 61850-6, 7-2 and 9-2

Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10 with 92LE publisher's protocol implementation conformance statement and extra information for testing: "IEC 61850-9-2 LE Stand Alone Merging Unit (SAMU) Manual, Version 3.2".

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 as defined in the UCAIUG Test procedures for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers using IEC 61850-9-2" (9-2LE), version 1.1):


11a Sampled Value publish (15/17)	50 Hz with 80 samples per cycle
11a Sampled Value publish (15/17)	60 Hz with 80 samples per cycle

This certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCA 61850 Analyzer 61850 version 4.25.00. The test is based on the UCAIUG "Test procedures 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". This document has been issued for information purposes only, and the original paper copy of the test report: No. 74101671-MOC/INC 12-01163 will prevail.

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

Arnhem, August 8, 2012


M. Adriaansen
Regional Director Management & Operations Consultancy


R. Schimmer
Certification Manager

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System

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Applicable Test Procedures from the UCAIUG "Test procedures for Sampled Values Publishers according to the "Implementation Guideline for Digital Interface to Instrument Transformers' using IEC 61850-9-2" (9-2LE), version 1.1"

Conformance Block	Mandatory	Conditional
Configuration	Cnf1, Cnf2, Cnf3, Cnf4, Cnf5, Cnf6, Cnf7, Cnf8	Cnf9
11a Sampled Value Publishing 50 Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14, Svp15	Svp4, Svp7, Svp8, Svp12, Svp13, Svp16, Svp17
11a Sampled Value Publishing 60Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14, Svp15	Svp4, Svp7, Svp8, Svp12, Svp13, Svp16, Svp17