



# IEC 61850 Certificate Level A<sup>1</sup>

No. 74102055-MOC/INC 12-01803

Issued to:  
NR Electric Co., Ltd  
69 Suyuan Avenue  
Jiangning District  
Nanjing City 211102  
China

For the 92LE publisher:  
PCS-221 Merging Unit  
HW version R1.00  
SW version R1.00  
Supporting:  
3 phase voltage and current  
Neutral is calculated or measured



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 9-2LE publisher's protocol implementation conformance statement: "Protocol Implementation Conformance Statement for the IEC 61850 interface in PCS-221, October 2012" and extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the 92LE Publisher in PCS-221, October 2012".

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 (14/17)	50 Hz with 80 samples per cycle
11a Sampled Value publish (14/17)	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 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 1.1". This document has been issued for information purposes only, and the original paper copy of the test report: No. 74102055-MOC/INC 12-01802 will prevail.

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

Arnhem, October 3, 2012

M. Adriaensen  
Director Intelligent Networks & Communications

R. Schimmel  
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	
11a Sampled Value Publishing 50 Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14, Svp15	Svp4, Svp7, Svp8, Svp12, Svp13, Svp16
11a Sampled Value Publishing 60Hz, 80 samples/cycle	Svp1, Svp2, Svp3, Svp6, Svp10, Svp11, Svp14, Svp15	Svp4, Svp7, Svp8, Svp12, Svp13, Svp16