



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

No. 74105039-OPE/INC 14-2105

Issued to:  
Smarter Grid Solutions Ltd  
Corunna House  
39 Cadogan St  
G2 7AB Glasgow  
United Kingdom

For the server product:  
Brodersen RTU32  
Software version: 7.0  
Hardware version: UCN-26IOA/221B0110.D



Issued by:

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

## IEC 61850 First Edition Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1 Communication networks and systems in substations

The conformance test has been performed according to IEC 61850-10, the UCA International Users Group Device Test Procedures version 2.3 with TPCL<sup>2</sup> version 1.7.3, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in Brodersen RTU32, version 1.0", "Model Implementation Conformance Statement for the IEC 61850 interface in Brodersen RTU32, version 1.0" and "Technical Issues Implementation Conformance Statement for the IEC 61850 interface in Brodersen RTU32, version 1.0" and the extra information for testing: "Protocol Implementation eXtra Information for Testing for the IEC 61850 interface in Brodersen RTU32, version 1.0".

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 (21/24)	12a	Direct Control (4/12)
2	Data Sets (3/6)	13	Time Synchronization (3/5)
5	Unbuffered Reporting (14/19)		

This certificate includes a summary of the test results as carried out at DNV KEMA in The Netherlands with UniCA 61850 Client Simulator 4.28.05 with test suite 3.27.03 and UniCA 61850 Analyzer 5.28.04. This document has been issued for information purposes only, and the original paper copy of the DNV KEMA report No. 74105039-OPE/INC 14-2104 will prevail.

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

Arnhem, July 10, 2014

  
M. Adriaensen  
Head of Department Operational Excellence

  
R. Schimmel  
Certification Manager

<sup>1</sup> Level A - Independent test lab with certified ISO 9001 Quality System

<sup>2</sup> TPCL - Test procedures change list



International  
Usersgroup

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.7.3.

<b>Conformance Block</b>	<b>Mandatory</b>	<b>Conditional</b>
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN2, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4	Rp6, Rp8, RpN5
12a: Direct Control	CtIN3, CtIN8 DOns1	DOns3
13: Time Sync	Tm1, Tm2	TmN1