No. 12143036-OPE/INC 14-1088rev2

Issued to:
SAC/ARTECHE
Cólquide 6, Portal 2
28230 Las Rozas, Madrid
Spain

For the server product:
saTECH BCU 152
Bay Control Unit
Software version: v1.6
S/N 1401294701

Issued by: **KEMA** DNV

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[2] version 1.7, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in saTECH BCU 152", "Model Implementation Conformance Statement for the IEC 61850 interface in saTECH BCU 152" and "TISSUES Implementation Conformance Statement for the IEC 61850 interface in saTECH BCU 152" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in saTECH BCU 152".

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 (17/24)		9a	GOOSE Publish (9/13)
2	Data Sets (3/6)		9b	GOOSE Subscribe (11/11)
5	Unbuffered Reporting (16/19)		12a	Direct Control (7/12)
6	Buffered Reporting (18/21)		12b	SBO Control (9/14)
			13	Time Synchronization (4/5)

This certificate includes a summary of the test results as carried out at SAC in Spain with UniCA 61850 Client Simulator 4.28.04 with test suite 3.28.00 and UniCA 61850 Analyzer 5.28.03. This document has been issued for information purposes only, and the original paper copy of the DNV KEMA report No. 12143036-OPE/INC 14-1098 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV KEMA by SAC. 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 22, 2014

M. Adriaensen
Head of Department Operational Excellence

R. Schimmel
Certification Manager

[1] Level A - Independent test lab with certified ISO 9001 Quality System
[2] TPCL - Test procedures change list

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.7

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv8, SrvN1f
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10, Rp12 RpN1, RpN2, RpN3, RpN4	Rp5, Rp8, Rp9, RpN5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10, Br11, BrN6
9a: GOOSE Publish	Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a	Gop1, Gop10b, GopN2
9b: GOOSE Subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b, Gos4
12a: Direct Control	CtlN3, CtlN8, DOns1	Ctl2, Ctl7, CtlN11, DOns3
12b: SBO Control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, SBOns2	Ctl2, Ctl7, CtlN11
13: Time Sync	Tm1, Tm2, TmN1	TmN2