IEC 61850 Certificate Level A[1]

No. 74105120-OPE/INC 14-0948

Issued to:
Megger
4271 Bronze Way
DALLAS TX 75237-1088
USA

For the server product:
SMRT36
Smart protective relay test system
Firmware version: 1.260
Hardware version: GenRev:2.52

Issued by: **KEMA**

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 1.7.1, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement For the IEC 61850 interface in SMRT Family, MPRT8445, MPRT2145 and FREJA40X Family, Megger Part# 83687 – Version 1 – March 19, 2014", "Model Implementation Conformance Statement For the IEC 61850 interface in SMRT Family, MPRT8445, MPRT2145 and FREJA40X Family Megger Part # 83685 – Version 1 – March 19, 2014" and "TISSUES Implementation Conformance Statement For the IEC 61850 interface in SMRT Family, MPRT8445, MPRT2145 and FREJA40X Family Megger Part # 83686 – Rev 1 – March 19, 2014" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in Megger SMRT and MPRT Units, Megger Part # 83688 – Version 1 – March 19, 2014".

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):

9a	GOOSE Publish	(8/13)
9b	GOOSE Subscribe	(11/11)
13	Time Synchronization	(3/5)

This certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCAsim GOOSE 2.27.01 with test suite 2.27.06 and UniCA 61850 Analyzer 5.28.02. This document has been issued for information purposes only, and the original paper copy of the KEMA report No. 74105120-OPE/INC 14-0861 Rev 3.0 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KEMA by Megger. 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, March 19, 2014

M. Adriaensen
Director Intelligent Networks & Communication

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 1.7.1

Conformance Block	Mandatory	Conditional
9a: GOOSE Publish	Gop2, Gop3, Gop4, Gop7, Gop9, Gop10a	Gop5, Gop10b
9b: GOOSE Subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b, Gos4
13: Time Sync	Tm1, Tm2,	TmN1