



IEC 61850 Certificate Level A¹

No. 74100686 MOC/INC 11-1468

Issued to:
A. Eberle GmbH & Co. KG
Aalener Straße 30/32
90441 Nürnberg
Germany

For the product:
PQI-D Power Quality Interface
Firmware 1.44.01



The product has not shown to be non-conforming to:
IEC 61850-6, 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 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement (PICS) for the IEC 61850 interface in PQI-D: Power Quality Interface, Version: 1.1", "Model Implementation Conformance Statement (MICS) for the IEC 61850 interface in PQI-D: Power Quality Interface, Version: 1.3", "TISSUES Implementation Conformance Statement (TICS) for the IEC 61850 interface in PQI-D: Power Quality Interface, Version: 1.0" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) of the IEC 61850 Interface in PQI-D: Power Quality Interface, Version: 1.1".

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 UCA International Users Group Device Test procedures v2.2b):

1 Basic Exchange (15/24)	13 Time Synchronization (3/5)
2 Data Sets (3/6)	14 File Transfer (4/7)
5 Unbuffered Reporting (13/18)	

This Certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCAsim 61850 version 3.23.00 with test suite 3.21.02 and UniCA 61850 analyzer 4.23.02. The test is based on the UCA International Users Group Device Test Procedures version 2.2b. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74100686 MOC/INC 11-1467 will prevail.

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

Arnhem, 16 September 2011

M. Adriaansen
Regional Director Management & Operations Consulting

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 UCA International Users Group Device Test Procedures version 2.2b

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv8
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10 RpN1, RpN2, RpN3, RpN4	Rp5, Rp8, RpN5
13: Time sync	Tm1, Tm2, TmN1	
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	