



IEC 61850 Certificate Level A¹

No. 74102155-MOC/INC 12-02412

Issued to:
AMETEK Power Instruments
255 North Union Street
Rochester, NY 14605
USA

For the product:
TR-61850 Multi-Function Recorder
IEC 61850 version 1.0.0

Issued by:



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, the UCA International Users Group Device Test Procedures version 2.3 with TPCL² version 1.5, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in TR61850, revision 1.0", "Model Implementation Conformance Statement (MICS) for the IEC 61850 interface in TR61850, revision 1.0" and "Technical Issue Implementation Conformance Statement (TICS) for the IEC 61850 interface in TR61850, revision 1.0" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in TR61850, revision 2.0".

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 (16/24)	9a	GOOSE Publish (7/13)
2	Data Sets (3/6)	9b	GOOSE Subscribe (10/11)
5	Unbuffered Reporting (15/19)	13	Time Synchronization (3/5)
6	Buffered Reporting (17/21)		

This certificate includes a summary of the test results as carried out at KEMA in the Netherlands with UniCA 61850 Client simulator 3.25.02 with test suite 3.24.03 and UniCA 61850 Analyzer 5.26.01. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74102155-MOC/INC 12- 02411 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KEMA by AMETEK Power Instruments. 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, December 20, 2012

M. Adriaensen
Director Intelligent Networks & Communication

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Certification Manager

- 1 Level A - Independent test lab with certified ISO 9000 or ISO 17025 quality system
- 2 TPCL - Test procedures change list

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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.3 with TPCL version 1.5

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	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
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10, Br11
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop10a	Gop1, Gop10b
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
13: Time sync	Tm1, Tm2, TmN1	