

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

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No. 74100682-MOC/INC 11-2130

Issued to: Microelettrica Scientifica S.p.A. Via Alberelle, 56/58 20089, Rozzano (MI) Italy



For the product: FMR-R 850 Version 2.19.1

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: "IEC61850 FMR PICS Rev0", "IEC61850 FMR MICS Rev0", "IEC61850 FMR TICS Rev0" and product's extra information for testing: "IEC61850 FMR PIXIT Rev0".

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):

<ol> <li>Basic Exchange (16/24)</li> <li>Data Sets (3/6)</li> <li>Unbuffered Reporting (13/18)</li> </ol>	<ul><li>6 Buffered Reporting (15/20)</li><li>13 Time Synchronization (4/5)</li></ul>
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This Certificate includes a summary of the test results as carried out at Microelettrica Scientifica in Italy with UniCAsim 61850 version 3.23.02 with test suite 3.23.00 and UniCA 61850 analyzer 4.23.02. The test is based on the UCA International Users Group Device Test Procedures version 2.2. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 74100682-MOC/INC 11-2129 will prevail.

The test has been carried out on one single specimen of the products as referred above and submitted to KEMA by Microelettrica Scientifica. 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, 5 August 2011

Laws

M. Adriaensen Regional Director Management & Operations Consulting

1 Level A - Independent Test lab with certified ISO 9000 or ISO 17025 Quality System

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P Cioc Test Engineer



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	Srv6, Srv8
	Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	
2: Data Sets	Dset1, Dset10a, DsetN1ae	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10	Rp5, Rp8, RpN5
	RpN1, RpN2, RpN3, RpN4	
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12	Br5, Br10
	BrN1, BrN2, BrN3, BrN4, BrN5	
13: Time sync	Tm1, Tm2, TmN1	Tm3

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