IEC 61850 Certificate Level A[1]

UCA International Users Group

No. 10015017-INC 17-2320

Issued to:

Qualitrol Company LLC
1385 Fairport Road
Fairport, New York 14450
United States of America

For the server product:

QTMS Transformer Monitoring System
QTMS software version: 2.8.0
IEC61850 server version: 01.00.06
S/N: 50264450-1-1

The server product has not been shown to be non-conforming to:

IEC 61850 Edition 2 Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems for power utility automation

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL[2] 1.2.4 with product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement IEC 61850 for QTMS Server and Client, document ID: IST-131-3", "Model Implementation Conformance Statement IEC 61850 for Qualitrol Transformer Monitoring System, document ID: IST-131-2" and "61850 Tissues Conformance Statement, document ID: IST-131-6" and the extra information for testing: "Protocol Implementation Extra Information for Conformance Testing, document ID: IST-131-5".

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 (17/26)		13	Time Synchronization (4/7)
2	Data Sets (4/7)		14	File Transfer (7/8)
2+	Data Set Definition (24/24)			
5	Unbuffered Reporting (21/21)			
6	Buffered Reporting (28/30)			

This certificate includes a summary of the test results as carried out at DNV GL in The Netherlands with UniGrid SA Client Simulator 1.1 with test suite Ed2 1.1 and UniCA 61850 Analyzer 5.31.02. This document has been issued for information purposes only, and the original paper copy of the DNV GL verification report No. 10015017-INC 17-2319 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by Qualitrol. The manufacturer's production process has not been assessed. This certificate does not imply that DNV GL has approved any product other than the specimen tested.

Arnhem, June 15, 2017

P. Cioci
Business Director
Intelligent Networks and Communication

Issued by:

DNV·GL

DNV KEMA is now DNV GL

R. Schimmel
Verification 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 Edition 2 Server Test Procedures version 1.0 with TPCL 1.2.4

Conformance Block		Mandatory	Conditional
1:	Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv8, sSrvN1f
2:	Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
2+:	Data Set Definition	sDs2, sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs9, sDs11, sDs13, sDs14, sDsN1cd, sDsN2, sDsN3, sDsN4, sDsN5, sDsN6, sDsN7, sDsN8, sDsN9, sDsN10	sDs12, sDsN11, sDsN12
5:	Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRp13, sRpN5
6:	Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr15, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr6, sBr7, sBr8, sBr10, sBr11, sBr12, sBr13
13:	Time sync	sTm1, sTm2, sTmN1	sTmN2
14:	File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFtN1c