

IEC 61850 Certificate Level A¹

No. 74108408-OPE/INC 15-1917

Issued to: OOO-MP3 2nd Kabelnaya str., 2, build.3 office 92 111024 Moscow Russia **For the server product**: MP3-1 Л3 (L3) with UKB-1E IEC 61850 REMOTE TERMINAL BLOCK Software version: 7.002 MP3-1 S/N: 1347 UKB-1E S/N: 120

The server product has not been 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 Server Device Test Procedures version 2.3 with TPCL² version 1.8, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in MP3-1, dated July 2015", "MICS for MP3-1, dated July 2015" and "TISSUES Implementation Conformance Statement for the IEC 61850 interface in MP3-1, dated July 2015" and the extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in MP3-1, dated July 2015".

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 (20/24) | 9a | GOOSE Publish (8/12) |
|---|-------------------------------|-----|------------------------------|
| 2 | Data Sets (3/6) | 9b | GOOSE Subscribe (11/11) |
| 4 | Setting Group Selection (3/3) | 12a | Direct Control (5/12) |
| 5 | Unbuffered Reporting (19/19) | 12d | Enhanced SBO Control (10/19) |
| 6 | Buffered Reporting (26/28) | 13 | Time Synchronization (3/5) |
| | | 14 | File Transfer (7/7) |

This certificate includes a summary of the test results as carried out at NTC FSK UES in Russia with UniCA 61850 Client Simulator 4.29.03 with test suite 3.29.00 and UniCA 61850 Analyzer 5.29.02. This document has been issued for information purposes only, and the original paper copy of the DNV GL report No. 74108408-OPE/INC 15-1918 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by OOO-MP3. 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, 28 July 2015

BIN

M. Adriaensen Head of Department Operational Excellence

Issued by:





¹ Level A - Independent test lab with certified ISO 9001 Quality System ² TPCL - Test procedures change list

Copyright © KEMA Nederland B.V. Arnhem, the Netherlands. All rights reserved. It is prohibited to update or change this certificate in any manner whatsoever, including but not limited to dividing it into parts.



IEC 61850 Certificate Level A No. 74108408-OPE/INC 15-1917

Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 2.3 with TPCL 1.8

| Conformance Block | | Mandatory | Conditional |
|-------------------|----------------------------|---|---|
| 1: | Basic Exchange | Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4 | AssN3, Srv6, Srv7, Srv8, SrvN1e, SrvN1f, SrvN3 |
| 2: | Data Sets | Dset1, Dset10a, DsetN1ae | |
| 4: | Setting Group Selection | Sg1, SgN1a, Sg3 | |
| 5: | Unbuffered Reporting | Rp1, Rp2, Rp3, Rp4, Rp9, Rp15, RpN1, RpN2, RpN3, RpN4, RpN8 | Rp5, Rp6, Rp7, Rp8, Rp10, Rp11, Rp12, RpN5 |
| 6: | Buffered Reporting | Br1, Br2, Br3, Br4, Br9, Br15, Br20, Br21, Br22, Br25, Br26, Br27, Br28, BrN1, BrN2, BrN3, BrN4, BrN5, BrN8 | Br5, Br6, Br7, Br8, Br10, Br11, Br12 |
| 9a: | GOOSE Publish | Gop2, Gop3, Gop4, Gop9, Gop10a | Gop1, Gop7, Gop10b |
| 9b: | GOOSE Subscribe | Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6 | Gos1b, Gos4 |
| 12a: | Direct Control | CtlN3, CtlN8, DOns1 | CtIN11 DOns3 |
| 12d: | Enhanced SBO Control | Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9, SBOes1, SBOes2, SBOes3 | CtIN11 |
| 13: | Time Sync | Tm1, Tm2 | TmN1 |
| 14: | File Transfer | Ft1, Ft2ab, Ft4, FtN1ab | Ft2c, Ft3, FtN1c |

KEMA Nederland B.V. Utrechtseweg 310, 6812 AR Arnhem, P.O. Box 9035, 6800 ET Arnhem, the Netherlands T +31 26 356 2025 F +331 26 351 36 83 salesdesk@dnvgl.com www.dnvgl.com