



IEC 61850 Certificate Level B¹



No. VAL_P532_631

Issued to:
Schneider Electric
Lyoner Strasse, 44-48,
D-60528 Frankfurt am Main, Germany

For the product:
Schneider MiCOM P532
Type: Modular Line-Differential Protection and Bay
Control Unit
Version: -631, -221

Issued by:
Schneider Electric Infrastructure Business China
CTC Validation Laboratoires

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 TISSUE implementation conformance statements: "Protocol Implementation Conformance Statement (PICS), version P532-631-221", "Model Implementation Conformance Statement (MICS), version P532-631-221", "IEC61850 Tissues Implementation Statement (TICS), version 02E", and extra information for testing "Protocol Implementation EXTRA INFORMATION FOR TESTING (PIXIT), version 04F".

The following IEC 61850 conformance blocks are 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 Version 2.3 with TPCL² version 1.5):

| | | | |
|----|-------------------------------|-----|--------------------------------|
| 1 | Basic Exchange (22/24) | 12a | Direct Control (5/12) |
| 2 | Data Sets (3/6) | 12c | Enhanced Direct Control (6/13) |
| 4 | Setting Group Selection (2/3) | 12d | Enhanced SBO Control (11/19) |
| 5 | Unbuffered Reports (15/19) | 13 | Time Synchronization (4/5) |
| 6 | Buffered Reports (17/21) | 14 | File Transfer (4/7) |
| 9a | GOOSE Publish (10/13) | | |
| 9b | GOOSE Subscribe (11/11) | | |

Schneider Electric grants this Certificate on account of tests performed at the Schneider Electric Infrastructure Business CTC's Validation Laboratories in Shanghai China, on 10/10/2012, with UniCASim 61850 ver 3.25.02 simulating an IEC 61850 client and the UniCA Analyzer ver 4.21.03. The tests are based on the UCA International Users Group Device Test Procedure Version 2.3 with TPCL version 1.5. This certificate has been issued for information purposes only and the original copy of the Schneider report: No. Schneider_VAL_P532_631_RPT_01, on 10/10/2012 will prevail.

The tests have been carried out on one single specimen of the above-mentioned products, submitted by *Schneider Electric*. The certificate does not include an assessment of the manufacturer's production process. Conformity of his production process or any other product than the specimen tested by CTC Validation Laboratories is not the responsibility of Schneider Electric Infrastructure Business CTC Validation Laboratories.

Baohua WANG
CTC Validation Manager

Shanghai, 2012-10-30
Xiaohui WANG
Test Engineer

¹ Level B – Tester with ISO 9001 Quality System

² TPCL – Test Procedure 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 | AssN6 Srv6, Srv7, Srv8, Srv10, SrvN1e, SrvN1f, SrvN3 |
| 2: Data Sets | Dset1, Dset10a, DsetN1ae | |
| 4: Setting Group Selection | Sg1, SgN1a | |
| 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, Gop5, Gop8 Gop10b, GopN1 |
| 9b: GOOSE subscribe | Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6 | Gos1b, Gos4 |
| 12a: Direct control | CtlN3, CtlN8, DOns1, DOns3 | CtlN11 |
| 12c: Enhanced Direct control | CtlN3, CtlN8 Does2, Does5 | Ctl7, CtlN11 |
| 12d: Enhanced SBO control | Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9, SBOes1, SBOes2, SBOes3 | Ctl7, CtlN11 |
| 13: Time sync | Tm1, Tm2, TmN1 | Tm3 |
| 14: File transfer | Ft1, Ft2ab, Ft4, FtN1 ab | |