IEC 61850 Certificate Level B[1]

No. VAL_P841_A0C

Issued to:
Schneider Electric
Building 6B/C, F Block, No.188, Xinjun Ring Rd
Pujiang Hi-Tech Park, Minhang District, Shanghai, China

For the product:
Schneider MiCOM P841
Type: Multifunction Line Terminal IED
Software Version: A0C
Hardware Suffix: K

Issued by:
Schneider Electric China
CTC Validation Laboratory

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 A42", "Model Implementation Conformance Statement (MICS), version A42", "IEC61850 Tissues Implementation Statement (TICS), version A42", and extra information for testing "Protocol Implementation EXTRA INFORMATION FOR TESTING (PIXIT), version A42".

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 TPCL[2] version 1.5):

1	Basic Exchange (22/24)	12a	Direct Control (5/12)
2	Data Sets (3/6)	12b	SBO Control (6/14)
4	Setting Group Selection (2/3)	12c	Enhanced Direct Control (5/13)
5	Unbuffered Reports (14/19)	12d	Enhanced SBO Control (10/19)
6	Buffered Reports (16/21)	13	Time Synchronization (4/5)
9a	GOOSE Publish (12/13)	14	File Transfer (6/7)
9b	GOOSE Subscribe (10/11)		

Schneider Electric grants this Certificate on account of tests performed at the Schneider Electric Infrastructure Business CTC's Validation Laboratories in Shanghai China, on 08/19/2013, with UniCASim 61850 ver 4.27.04 simulating an IEC 61850 client and the UniCA Analyzer ver 5.27.04. 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_P841_A0C_RPT_01, on 08/20/2013 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 CTC Validation Laboratory.

Baohua WANG
CTC Validation Manager

Shanghai, 2013-08-23
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, Srv9, Srv10, SrvN1e, SrvN1f
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, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12, Br14, BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br10
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7, Gop10a	Gop1, Gop5, Gop6, Gop8, Gop9, Gop10b, GopN1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	Gos1b
12a: Direct control	CtlN3, CtlN8, DOns1, DOns3	CtlN11
12b: SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, SBOns2	
12c: Enhanced Direct control	CtlN3, CtlN8 Does2, Does5	CtlN11
12d: Enhanced SBO control	Ctl3, CtlN1, CtlN2, CtlN3, CtlN4, CtlN9, SBOes1, SBOes2, SBOes3	CtlN11
13: Time sync	Tm1, Tm2, TmN1	Tm3
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, FtN1c