IEC 61850 Certificate Level A[1]

No. 30102113 -Consulting 10-1576

Issued to:

Yousung Instrument & Electric Co., Ltd.
#7-13, SONGDO-DONG, YEONSU-GU,
INCHEON-CITY, 406-840
Republic of Korea

For the product:
YSDPI9800
Multifunction Protection
Version 1.0

Issued by: **KEMA**

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: "Protocol Implementation Conformance Statement for the IEC 61850 interface in <YSDPI9800>", "MODEL IMPLEMENTATION CONFORMANCE STATEMENT FOR <YSDPI9800 – MULTIFUNCTION PROTECTION>", "TISSUES Implementation Conformance Statement for the IEC 61850 interface in < YSDPI9800>" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in <YSDPI9800>".

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 v2.2):

1	Basic Exchange (20/24)		9a	GOOSE Publish (5/12)
2	Data Sets (3/6)		9b	GOOSE Subscribe (9/10)
2+	Data Set Definition (23/29)		12a	Direct Control (7/11)
5	Unbuffered Reporting (15/18)		12d	Enhanced SBO Control (12/19)
6	Buffered Reporting (17/20)		13	Time Synchronization (4/5)
			14	File Transfer (5/7)

This Certificate includes a summary of the test results as carried out at KEPRI in Republic of Korea with UniCAsim 61850 version 3.21.02 with test suite 3.21.00 and UniCA 61850 analyzer 4.21.03. 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 30102113 -Consulting 10-1575 will prevail.

The test has been carried out on one single specimen of the products as referred above and submitted to KEMA by Yousung Instrument & Electric Co., Ltd.. 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, July 23, 2010

W. Strabbing
Manager Intelligent Networks and Communication

S.J.T. Mulder
Senior Test Engineer

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

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 2.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, SrvN2, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
2+: Data Set Definition	Dset2, Dset3, Dset4, Dset5, Dset6, Dset7, Dset8, Dset9 DsetN1cd, DsetN2, DsetN3, DsetN4, DsetN5, DsetN6, DsetN7, DsetN8, DsetN9, DsetN10, DsetN11, DsetN12, DsetN13, DsetN14, DsetN15	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, Rp10 RpN1, RpN2, RpN3, RpN4	Rp5, Rp6, Rp8, Rp9, RpN5
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, Br12 BrN1, BrN2, BrN3, BrN4, BrN5	Br5, Br6, Br10, Br11
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1
9b: GOOSE subscribe	Gos1a, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12a: Direct control	CltN3, CtlN8, DOns1, DOns3	Ctl2, Ctl7, CtlN11
12d: Enhanced SBO control	Ctl3, CltN1, CltN2, CltN3, CltN4, CltN9 SBOes1, SBOes2, SBOes3	Ctl2, Ctl7, CtlN11
13: Time sync	Tm1, Tm2, TmN1	Tm3
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	FtN1cd