

IEC 61850 Certificate Level A¹

Page 1/2
No. 19-051657-01-1

Issued to:
Korea Electric Power Corporation
#55 Jeollyeok-ro, Naju-si, Jeollanam-do
Republic of Korea, 58217

For the server product:
Signal Generator
ZT-SG-100
Software Version 1.0
OS : Linux

Issued by: **Korea Testing Laboratory**

**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 2.0 with product's protocol, model and technical issue implementation conformance statements: "ZT-SG-100_PICS_v.1", "ZT-SG-100_MICS_v.1", "ZT-SG-100_TICS_v.1" and product's extra information for testing: "ZT-SG-100_PIXIT_v.1".

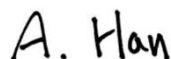
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test):

1	Basic Exchange (20/28)	9a	GOOSE Publish (11/13)
2	Data Sets (3/7)	13	Time Synchronization (4/7)
5	Unbuffered Reporting (20/22)		

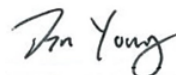
This Certificate includes a summary of the test results as carried out at Korea Testing Laboratory in Republic of Korea with IEC 61850 Ed2 KTL Testing Tool 1.0 with test suite IEC 61850 Ed2 Server Conformance Test V.1.0 and IEC 61850 Ed2 KTL Trace Manager V.1.0. This document has been issued for information purposes only, and the original paper copy of the KTL report: No. TR-19-051657-01-1 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KTL by Korea Electric Power Corporation. The manufacturer's production process has not been assessed. This certificate does not imply that KTL has certified or approved any product other than the specimen tested.

Seoul, Aug. 26, 2019



Ah Han
Senior Engineer
Research & Business Development Center



Jinyong Kim
Principal Engineer
Research & Business Development Center

1 Level A - Independent Test lab with accredited ISO/IEC 17025 Quality System

Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 2.0

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv8, sSrvN1e, sSrvN1f
2: Data Sets	sDs1, sDs10a, sDsN1ae	
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRpN5
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11, sGop12	sGop1, sGop6, sGopN1, sGopN2
13 Time sync	sTm1, sTm2, sTmN1	sTmN2