

# IEC 61850 Certificate Level A<sup>1</sup>

Ref. No: 2018TS02101

Issued to:  
**LSIS Co., Ltd.**  
**LS Tower, 127 LS-RO, DONGAN-GU, ANYANG-SI,**  
**GYEONGGI-DO**  
**Republic of Korea**

For the server product:  
**GIMAC II PLUS**  
**Measuring Device**  
**Firmware version 2.0**

Issued by:  
**Korea Electrotechnology Research Institute**  
**111, Hanggaul-ro, Sangnok-gu, Ansan-si, Gyeonggi-do, 15588, Republic of Korea**

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, UCA International Users Group Device Test Procedures version 3.1, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in GIMAC II PLUS, v1.1", "Model Implementation Conformance Statement for the IEC 61850 interface in GIMAC II PLUS, v1.1", "TISSUES Implementation Conformance Statement for the IEC 61850 interface in GIMAC II PLUS, v1.1" and product's extra information for testing "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in GIMAC II PLUS, v1.1".

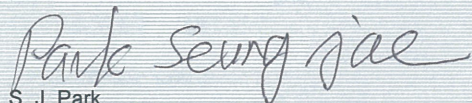
The following IEC 61850 conformance blocks are tested with a positive result (number of relevant and executed test cases / total number of test cases) :

1	Basic Exchange (21/24)	12a	Direct Control (5/11)
2	Data Sets (3/6)	12b	SBO Control (8/14)
2+	Data Set Definition (24/24)	12c	Enhanced Direct Control (6/13)
5	Unbuffered Reporting (18/18)	12d	Enhanced SBO Control (11/19)
		13	Time Synchronization (4/5)

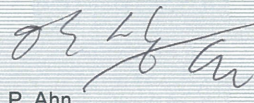
This Certificate includes a summary of the test results as carried out at KERI in Republic of Korea with UniCA 61850 Client simulator version 4.29.03 with test suite version 3.29.05(TP 3.0) and UniCA 61850 analyzer version 5.31.00. This document has been issued for information purposes only, and the original paper copy of the KERI report: 2018TS02101 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KERI by LSIS Co., Ltd. The manufacturer's production process has not been assessed. This Certificate does not imply that KERI has approved any product other than the specimen tested.

Republic of Korea, October 22, 2018



S. J. Park  
Executive Director  
Power Apparatus Testing and Evaluation Division



S. P. Ahn  
Technical Manager

<sup>1</sup> Level A – Independent Tester with certified ISO 17025 Quality System

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 3.1

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, SrvN2, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
2+: Data Sets Definition	Dset2, Dset3, Dset4, Dset5, Dset6, Dset7, Dset8, Dset9 DsetN1cd, DsetN2, DsetN3, DsetN4, DsetN5, DsetN6, DsetN7, DsetN8, DsetN9, DsetN10, DsetN11, DsetN12, DsetN13, DsetN14	DsetN15a, DsetN15b
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp9, RpN1, RpN2, RpN3, RpN4, RpN8	Rp5, Rp6, Rp7, Rp8, Rp10, Rp11, Rp12, RpN5
12a: Direct control	CtiN3 DOs1	Cti2, CtiN11 DOs3
12b: SBO control	CtiN1, CtiN2, CtiN3, CtiN4, SBOs2	Cti2, Cti3, CtiN11
12c: Enhanced Direct control	CtiN3 DOes2, DOes5	Cti2, CtiN8, CtiN11
12d: Enhanced SBO control	CtiN1, CtiN2, CtiN3, CtiN4, CtiN9 SBOes1, SBOes2, SBOes3	Cti2, Cti3, CtiN11
13: Time sync	Tm1, Tm2	TmN1, TmN2