

IEC 61850 Certificate Level A¹

Ref. No: 2017TS01166

Issued to:
Hanbit EDS Co., Ltd
44-10 Techno 10-ro, Yuseong-gu, Daejeon 305510
Republic of Korea

For the server product:
USP-100M
Bushing & Tap Changer
Monitoring Device
Firmware version 1.0

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 3.03, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in <USP-100M>, v1.1", "Model Implementation Conformance Statement for the IEC 61850 interface in <USP-100M>, v1.1", "TISSUES Implementation Conformance Statement for the IEC 61850 interface in <USP-100M>, v1.1" and product's extra information for testing "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in <USP-100M>, 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 (19/24)	13	Time Synchronization (3/5)
2	Data Sets (3/6)	14	File Transfer (4/7)
6	Buffered Reporting (24/27)		

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 3.29.04(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: 2017TS01166 will prevail.

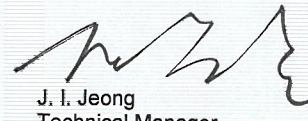
The test has been carried out on one single specimen of the product as referred above and submitted to KERI by Hanbit EDS Co., Ltd. The manufacturer's production process has not been assessed. This Certificate does not imply that KERI has approved any product other than the specimen tested.

Republic of Korea, April 26, 2017

Y. J. Lee
Executive Director
Power Apparatus Testing and Evaluation Division



J. I. Jeong
Technical Manager



¹ Level A – Independent Tester with certified ISO 17025 Quality System

Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 3.03

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3 Srv6, Srv8, SrvN1e, SrvN1f, SrvN3
2: Data Sets	Dset1, Dset10a, DsetN1ae	
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br9, Br20, Br21, Br22, Br25, Br26, Br27, Br28 BrN1, BrN2, BrN3, BrN4, BrN5, BrN8	Br6, Br7, Br8, Br10, Br11, Br12
13: Time sync	Tm1, Tm2	TmN1
14: File transfer	Ft1, Ft2ab, Ft4, FtN1ab	

