

IEC 61850 Certificate Level A¹

Ref. No: 21TC200185

Issued to:
Advanced Power Management Co.
2nd Industrial city, Kharj road, Riyadh,
Kingdom of Saudi Arabia

For the server product:
Partial Discharge Monitoring System
APM5000 Server SW 1.0
HW: Advantech UNO-4683
OS: Windows Server 2012 R2 Std.

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 3.3a, the product's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in APM5000 Server SW, v1.0", "Model Implementation Conformance Statement for the IEC 61850 interface in APM5000 Server SW, v1.0", "TISSUES Implementation Conformance Statement for the IEC 61850 interface in APM5000 Server SW, v1.0" and product's extra information for testing "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 interface in APM5000 Server SW, v1.0"

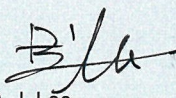
The following IEC 61850 conformance blocks are tested with a positive result (number of relevant and executed test cases / total number of test cases) :

1	Basic Exchange (18/25)	13	Time Synchronization (2/5)
2	Data Sets (5/6)		
2+	Data Set Definition (24/24)		
5	Unbuffered Reporting (18/18)		

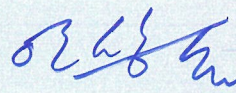
This Certificate includes a summary of the test results as carried out at KERI in Republic of Korea with UniCA 61850 Client simulator version 4.31.02 with test suite version 3.31(TP 3.3) and UniCA 61850 analyzer version 5.34.02. This document has been issued for information purposes only, and the original paper copy of the KERI report: 21TC200185 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KERI by Advanced Power Management Co. 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, March 16, 2021



D. J. Lee
Executive Director
High Voltage Testing Division



S. P. Ahn
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 3.3a

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, Srv6, Srv7, Srv8, SrvN1f
2: Data Sets	Dset1, Dset10a, DsetN1ae	Dset10b, DsetN1b
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
13: Time sync	Tm1, Tm2	