IEC 61850 Certificate Level A[1]

Issued to:
DoWoo Digitech.Co.,Ltd
A-708, Ssangyong IT Twin-tower,
Dunchon-daero, Jungwon-gu,
Seongnam-si, Gyeonggi-do,
Republic of Korea

For the server product:
SA IMD (Substation Automation Information
Monitoring & diagnosis Device)
DW-IPC-A-10000
Software Version 1.0
HW : DW-IPC-A-10000
OS : Windows Server 2019 Standard
S/N : DW 2301 IPCA1 001

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 2.0.6 with product's protocol, model and technical issue implementation conformance statements: "DOWOO_DS_DW-IPC-A-10000_PICS_v1_0", "DOWOO_DS_DW-IPC-A-10000_MICS_v1_0", "DOWOO_DS_DW-IPC-A-10000_TICS_v1_0" and the extra information for testing: "DOWOO_DS_DW-IPC-A-10000_PIXIT_v1_0".
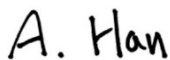
The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test):

1	Basic Exchange (21/26)	6	Buffered Reporting (32/33)
2	Data Sets (4/7)	12a	Direct Control (6/19)
2+	Data Set Definition (24/24)	13	Time Sync (4/7)
5	Unbuffered Reporting (22/23)	14	File Transfer (5/8)

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-23-014054-04-2 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to KTL by DoWoo Digitech.Co., Ltd. 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, Apr. 7, 2023

Ah Han
Principal Engineer
IT Convergence Technology Center

HwiYoung Lee
Engineer
IT Convergence Technology Center

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

Korea Testing Laboratory
08389, 87, Digital-ro 26-gil, Guro-gu, Seoul, Rep. of KOREA
Tel: +82-2-860-1474   Fax: +82-2-860-1419

UCA International Users Group
P.O. Box 315, Shell Knob
MO 65747 USA

Applicable Test Procedures from the UCA International Users Group Edition 2 Server Device Test Procedures version 2.0.6

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAss4, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrv8, sSrvN1abcdf, sSrvN4	sAssN6, sSrv6, sSrvN1e, sSrvN2, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
2+: Data Set Definition	sDs2, sDs3, sDs4, sDs5, sDs6, sDs7, sDs8, sDs9, sDs13, sDs14, sDsN1cd, sDsN2, sDsN3, sDsN4, sDsN5, sDsN6, sDsN7, sDsN8, sDsN9, sDsN10	sDs11, sDs12, sDsN11, sDsN12
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRp13, sRp15, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr16, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBr29, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr6, sBr7, sBr8, sBr10, sBr11, sBr12, sBr13, sBr15, sBr23, sBr24
12a: Direct Control	sCtl5a, sCtl10a, sDOns1, sDOns2	sCtl2a, sCtl16a
13: Time Sync	sTm1, sTm2, sTmN1	sTmN2
14: File Transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	