



IEC 61850 Certificate Level A¹

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Issued to: Daonsys Limited Company 32, Songdogwahak-ro, Yeonsu-gu, Incheon, Republic of Korea For the server product: Substation Automation Information Monitoring & diagnosis Device DAONSYS-MSA-SMD Software Version 1.5 HW : YSSMD-7200 with Windows Server 2012 R2 S/N : DO-MSA-SMD00150

Issued by: Korea Testing Laboratory

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, the UCA International Users Group Server Device Test Procedures version 3.3, the product's protocol, model and technical issue implementation conformance statements: "Daonsys_DAONSYS-MSA-SMD_PICS_v.1.5", "Daonsys_DAONSYS-MSA-SMD_MICS_v.1.5", "Daonsys_DAONSYS-MSA-SMD_TICS_ v.1.5" and the extra information for testing: "Daonsys_DAONSYS-MSA-SMD_SMD_PIXIT_v.1.5".

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

2Data Sets (3/6)12cEnhanced Direct Control (4/13)2+Data Set Definition (24/24)12dEnhanced SBO Control (10/19)5Unbuffered Reporting (18/18)13Time Synchronization (4/5)6Buffered Reporting (25/27)14File Transfer (7/7)	1 Basic I	Exchange (20/25)		12a	Direct	Control (3	3/11)		
5 Unbuffered Reporting (18/18) 13 Time Synchronization (4/5)	2 Data S	Sets (3/6)		12c	Enhand	ced Direct	t Control (4/13)	
	2+ Data S	Set Definition (24/24)		12d	Enhan	ced SBO	Control (1	0/19)	
6 Buffered Reporting (25/27)	5 Unbuff	ered Reporting (18/18)		13	Time S	Synchroniz	zation (4/5	5)	
	6 Buffere	ed Reporting (25/27)		14	File Tra	ansfer (7/	7)	·	

This Certificate includes a summary of the test results as carried out at KTL in Republic of Korea with IEC 61850 KTL Testing Tool with test suite IEC 61850 Server Conformance Test V.1.0 and IEC 61850 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-20-036046-01-5 will prevail.

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

Seoul, Aug. 28, 2020

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

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Applicable Test Procedures from the UCA International Users Group Server Device Test Procedures version 3.3.

Conformance Block	Mandatory	Conditional			
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN4, AssN5 Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	AssN3, AssN6 Srv6, Srv7, Srv8, SrvN1e, SrvN1f			
2: Data Sets	Dset1, Dset10a, DsetN1ae				
2+: Data Set 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			
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br9, Br20, Br21, Br22, Br25, Br26, Br27, Br28 BrN1, BrN2, BrN3, BrN4, BrN5, BrN8	Br5, Br6, Br7, Br8, Br10, Br11, Br12			
12a: Direct Control	CtlN3, DOns1	DOns3			
12c: Enhanced Direct Control	CtlN3, DOes2, Does5	CtlN6			
12d: Enhanced SBO Control	CtlN1, CtlN2, CtlN3, CtlN4, CtlN9 SBOes1, SBOes2, SBOes3				
13: Time Sync	Tm1, Tm2	TmN1, TmN2			
14: File Transfer	Ft1, Ft2ab, Ft4, FtN1ab	Ft2c, Ft3, FtN1c			