

IEC 61850 Certificate Level A¹

Issued to:

WAGO GmbH & Co. KG
Hansastraße 27
32423 Minden
Germany

For the client system:

WAGO 750-8212/0040-0001
Remote Terminal Unit
IEC 61850 version: 1.4.2.1
S/N: 37SUN31564010260494977+0000000000005630

The client system 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 in substations

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Client Conformance Test Procedures version 1.2 with client system's protocol, model and technical issue implementation conformance statements: "Protocol Implementation Conformance Statement for the IEC 61850 interface in WAGO 750-8212/0040-0001, Version 1.1", "Model Implementation Conformance Statement for the IEC 61850 Client Interface in WAGO 750-8212/0040-0001, Version: 1.1.0" and "TISSUES Implementation Conformance Statement for the IEC 61850 Client Interface in WAGO 750-8212/0040-0001, Version: 1.1.0" and product's extra information for testing: "Protocol Implementation eXtra Information for Testing (PIXIT) for the IEC 61850 Client interface in WAGO 750-8212/0040-0001, Version: 1.1.0".

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

1 Basic Exchange (17/24)	12a Direct Control (7/9)
2 Data Sets (2/10)	12b SBO Control (9/11)
3 Substitution (3/3)	12c Enhanced Direct Control (7/9)
5 Unbuffered Reporting (21/24)	12d Enhanced SBO Control (9/11)
6 Buffered Reporting (25/28)	13 Time Synchronization (3/4)

This certificate includes a summary of the test results as carried out at DNV in Germany with UniCA 61850 IED Simulator version 6.1.31, UniGrid SA Simulator with client test suite 20230705 and UniCA 61850 Analyzer 6.44.01. This document has been issued for information purposes only, and the archived DNV verification report No. 10432863-DSO 23-2964 rev 2 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV by WAGO GmbH & Co. KG. The manufacturer's production process has not been assessed. This certificate does not imply that DNV has approved any product other than the specimen tested.

Arnhem, July 10, 2023



G. Akse
Business Development Manager
Interoperability of Smart Power Systems

Issued by:




R. Schimmel
Verification Manager

¹ Level A - Independent test lab with certified ISO 9001 Quality System

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Applicable Test Procedures from the UCA International Users Group Edition 2 Client Conformance Test Procedures version 1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	cAss1, cAss2, cAss3, cAssN1, cAssN4, cAssN5, cAssN6	cAssN7 cSrv5, cSrv6, cSrv7, cSrv9, cSrv10, cSrvN3, cSrvN4, cSrvN5, cSrvN6
2: Data Sets		cDs3, cDsN1c
3: Substitution	cSub1, cSub3	cSub2
5: Unbuffered Reporting	cRp3, cRp4, cRp5, cRp8, cRp9, cRp10, cRp11, cRp13a, cRp14, cRp15, cRp19, cRpN2, cRpN5, cRpN6	cRp2, cRp6, cRp7, cRp16, cRp17, cRp18, cRpN1
6: Buffered Reporting	cBr3, cBr4, cBr5, cBr8, cBr9, cBr10, cBr11, cBr13a, cBr14, cBr15, cBr19, cBr30, cBr31, cBrN2, cBrN5, cBrN6	cBr2, cBr6, cBr7, cBr16, cBr17, cBr18, cBr32, cBr33, cBrN1
12a: Direct Control	cCtl4, cCtl5, cDOns1, cDOns2	cCtl1, cCtl2, cCtl3
12b: SBO Control	cCtl4, cCtl5, cSBOns1, cSBOns2, cSBOns3	cCtl1, cCtl2, cCtl3, cSBOns4
12c: Enhanced Direct Control	cCtl4, cCtl5, cDOes1, cDOes2	cCtl1, cCtl2, cCtl3
12d: Enhanced SBO Control	cCtl4, cCtl5, cSBOes1, cSBOes2, cSBOes3	cCtl1, cCtl2, cCtl3, cSBOes4
13: Time sync	cTm1, cTmN1	cTm2