

# IEC 61850 Certificate Level A<sup>1</sup>

No. 30630021-Consulting 2006-0552

Issued to:  
TOSHIBA Corporation  
Power Systems Protection and Control  
Fuchu Complex 1, TOSHIBA-Cho  
Fuchu-Shi, Tokyo, 183-8511  
Japan

For the product:  
GRZ100  
Software Version GSPZM 1-01-A  
Communication Firmware GPM850-01-B

Issued by:



The product has not shown to be non-conforming to:

## IEC 61850-6, 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 with product's protocol, model and technical issue implementation conformance statements: "IEC61850 ACSI conformance statement (PICS) 6F2S1126 ver.0.0", "IEC61850 Model Implementation Conformance Statement (MICS) GRZ100 6F2S1125 ver.0.0", "IEC61850 Tissues Conformance Statement (TICS) of the IEC 61850 communication interface in GRZ100 6F2S1128 ver.0.1", and extra information for testing (PIXIT) "Protocol implementation extra information for testing (PIXIT) of the IEC 61850 communication interface in GRZ100 6F2S1127 ver.0.3".

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 as defined in the UCA International Users Group Device Test procedures):

1	Basic Exchange	(19/23)	9a	GOOSE Publish	(7/11)
2	Data Set	(2/5)	9b	GOOSE Subscribe	(9/9)
4	Setting Group Selection	(2/3)	12c	Enhanced Direct Control	(3/11)
5	Unbuffered Reporting	(12/13)	13	Time Synchronization	(4/4)
6	Buffered Reporting	(14/15)	14	File Transfer	(3/6)

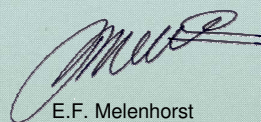
This Certificate includes a summary of the test results as carried out at the KEMA test laboratories in Arnhem, The Netherlands, with UniCASim 61850 version 2.14.00 test system running test suite "61850 Conformance Test 2.13.10c", UniCASim GOOSE version 2.14.00 with test suite "GOOSE conformance Test version 2.12.05" and UniCA 61850 analyzer version 4.13.02. The test is based on the UCA International Users Group Device Test Procedures version 1.1. This document has been issued for information purposes only, and the original paper copy of the KEMA report: No. 30630021-Consulting 2006-0553 will prevail.

The test have been carried out on one single specimen of the products as referred above and submitted to KEMA by TOSHIBA. The manufacturer's production process has not been assessed. This Certificate does not imply that KEMA has certified or approved any product other than the specimen tested.

Arnhem, July 28, 2006



S.J.L.M. Janssen  
Managing Director KEMA Consulting



E.F. Melenhorst  
Senior Test Engineer

1) Level A – Independent Test Lab with certified ISO 9000 or ISO 17025 Quality System

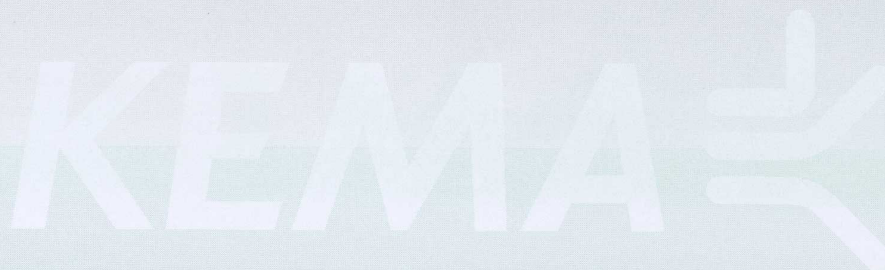
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Applicable Test Procedures from the UCA International Users Group Device Test Procedures version 1.1:

Conformance Block	Mandatory	Conditional
1: Basic Exchange	Ass1, Ass2, Ass3, AssN2, AssN3, AssN4, AssN5, Srv1, Srv2, Srv3, Srv4, Srv5, SrvN1abcd, SrvN4	Srv6, Srv7, Srv8, SrvN1e, SrvN3
2: Data Sets	Dset1, DsetN1ae	
4: Setting Group Selection	Sg1, SgN1	
5: Unbuffered Reporting	Rp1, Rp2, Rp3, Rp4, Rp7, RpN1, RpN2, RpN3, RpN4	Rp5, RpN5, RpN6
6: Buffered Reporting	Br1, Br2, Br3, Br4, Br7, Br8, Br9, BrN1, BrN2, BrN3, BrN4, BrN5	Br5, BrN6
9a: GOOSE publish	Gop2, Gop3, Gop4, Gop7	Gop1, Gop6, GopN1
9b: GOOSE subscribe	Gos1, Gos2, Gos3, GosN1, GosN2, GosN3, GosN4, GosN5, GosN6	
12c Enhanced Direct Control	CltN3, CltN8, DOes2	
13 Time sync	Tm1, Tm2, TmN1	TmN2
14 File transfer	Ft1, Ft2ab, FtN1ab	



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