



Product Service

# IEC 61850 Certificate

## Level A<sup>1</sup>

### No. D 17 05 92391 021

Issued to:

CYG SUNRI CO., LTD.  
No. 13, Keji North 1st Road, North Area of  
Hi-Tech Industrial Park, Nanshan District,  
Shenzhen518057, China

For the server product:

BP-2C  
Busbar Protection  
Software Version: V1.00

Issued by:

TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD  
SHANGHAI BRANCH  
*Communication Protocols*  
No.16 Lane 1951 Duhui Road  
Shanghai, 201 108,  
People's Republic of China

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 1.0 with TPCL2 version 1.2 with product's protocol, model and technical issue implementation conformance statements: "BP-2C\_PICS\_Server\_Ed2\_V1.0.pdf", "BP-2C\_MICS\_Server\_Ed2\_V1.0.pdf", "BP-2C\_TICS\_Server\_Ed2\_V1.0.pdf" and product's extra information for testing: "BP-2C\_PIXIT\_Server\_Ed2\_V1.0.pdf".

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 (25/26)	9a	GOOSE Publish (10/13)
2	Data Sets (4/7)	9b	GOOSE Subscribe (14/14)
3	Substitution (3/3)	12a	Direct Control (9/18)
4	Setting Group Selection (4/4)	12c	Enhanced Direct Control (9/20)
4+	Setting Group Definition (13/13)	12d	Enhanced SBO Control (16/28)
5	Unbuffered Reporting (21/21)	13	Time Synchronization (5/7)
6	Buffered Reporting (30/30)	14	File Transfer (8/8)
		15	Service Tracking (4/17)

This Certificate includes a summary of the test results as carried out at TÜV SÜD Certification and Testing (China) Co., Ltd Shanghai Branch in P.R. China with SimFlex CS Ed.2 version 2.0 with test suite 1.0-1.2-v0.4 and Wireshark version 1.12.1. This document has been issued for information purposes only, and the original paper copy of the TÜV SÜD report: No. 7482128408-TR705001700401, version V1-0 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to TÜV SÜD by CYG SUNRI CO., LTD.. The manufacturer's production process has not been assessed. This certificate does not imply that TÜV SÜD has certified or approved any product other than the specimen tested.

Shanghai, May 24, 2017

*Qinbo ZHOU*

Qinbo ZHOU  
Technical Certifier

*Cong WANG*

Cong WANG  
Test Engineer

<sup>1</sup> Level A - Independent Test lab with certified ISO/IEC 17025 Quality System

<sup>2</sup> Test Procedure Change List



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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL version 1.2

Conformance Block	Mandatory	Conditional
1: Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv8, sSrv9, sSrv10, sSrv11, sSrv12, sSrvN1e, sSrvN1f, sSrvN2, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
3: Substitution	sSub1, sSub2, sSub3	
4: Setting Group Selection	sSg1, sSg3, sSgN1	sSg11
4+: Setting Group Definition	sSg2, sSg4, sSg7, sSg8, sSg10, sSg12, sSgN2, sSgN3, sSgN4, sSgN5	sSg5, sSg6, sSg9
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp6, sRp7, sRp8, sRp10, sRp11, sRp12, sRp13, sRpN5
6: Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr15, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr6, sBr7, sBr8, sBr10, sBr11, sBr12, sBr13, sBr23, sBr24
9a: GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11	sGop2b, sGop5, sGop7, sGopN2
9b: GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos4, sGos6b
12a Direct control	sCtl5, sCtl10, sDOs1, sDOs2	sCtl2, sCtl13, sCtl16, sCtl17, sCtl19
12c Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl2, sCtl13, sCtl16, sCtl17, sCtl19
12d Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl2, sCtl4, sCtl6, sCtl16, sCtl17, sCtl19
13 Time sync	sTm1, sTm2, sTmN1	sTm3, sTm5
14 File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	sFt2c, sFt3, sFtN1c
15 Service tracking		sTrk1, sTrk2, sTrk7, sTrk8

## Zertifiziervertrag

Grundlage für die Zertifikatserteilung ist die Prüf- und Zertifizierungsordnung von TÜV SÜD Product Service.

Mit Erhalt des Zertifikates erkennt der Zertifikatsinhaber die jeweils gültige Fassung der Prüf- und Zertifizierungsordnung an ([www.tuev-sued.de/ps\\_regulations](http://www.tuev-sued.de/ps_regulations)) und wird somit Partner im Zertifizierungssystem von TÜV SÜD Product Service.

### Prinzipielle Voraussetzung für die Gültigkeit des Zertifikates:

- Gültigkeit der zitierten normativen Prüfgrundlage(n) ist gegeben
- und zusätzlich bei Zertifikaten mit Berechtigung zur Verwendung eines Prüfzeichens bzw. bei Zertifikaten für QM-Systeme:
- Voraussetzungen für vorschriftsmäßige Fertigung werden eingehalten.
- Die Fertigungs- bzw. Betriebsstätten werden regelmäßig überwacht.

## Certification contract

Certification is based on the TÜV SÜD Product Service Testing and Certification Regulations.

On receipt of the certificate the certificate holder agrees to the current version of the Testing and Certification Regulations ([www.tuev-sued.de/ps\\_regulations](http://www.tuev-sued.de/ps_regulations)) and thus becomes partner in the TÜV SÜD Product Service Certification System.

### Requirements for the validity of the certificate in principle:

- Validity of the quoted test standard(s)
- In addition for certificates with the right to use a certification mark and for QM certificates:
- Conditions for an adequate manufacturing are maintained
- Regular surveillance of the facility is performed

Akkreditierungen / Benennungen (Status 14.10.2013) /  
Accreditations / notifications (as of 2013-10-14)

## Deutschland / Germany

Produktsicherheitsgesetz (ProdSG) /  
Product Safety Act (ProdSG)

## Europa / Europe

- Niederspannungsrichtlinie 2006/95/EG
- Spielzeugrichtlinie 2009/48/EG
- Richtlinie für aktive medizinische Implantate 90/385/EWG
- Richtlinie für Medizinprodukte 93/42/EWG
- Richtlinie für In-vitro-Diagnostika 98/79/EG
- Richtlinie für Gasverbrauchseinrichtungen 2009/142/EG
- Richtlinie für persönliche Schutzausrüstungen 89/686/EWG
- EMV-Richtlinie 2004/108/EG
- Richtlinie für Sportboote 94/25/EG + 2003/44/EG
- Richtlinie für Maschinen 2006/42/EG
- Richtlinie für Ex-Schutz Geräte 94/9/EG
  
- Low Voltage Directive 2006/95/EC
- Toys Directive 2009/48/EC
- Directive for Active Implantable Medical Devices 90/385/EEC
- Directive for Medical Devices 93/42/EEC
- Directive on In Vitro Diagnostic Medical Devices 98/79/EC
- Directive for Gas Appliances 2009/142/EC
- Directive for Personal Protective Equipment 89/686/EEC
- EMC Directive 2004/108/EC
- Directive for Recreational Craft 94/25/EC + 2003/44/EC
- Directive for Machinery 2006/42/EC
- Directive for Ex Safe Equipment 94/9/EC
  
- ENEC Agreement for luminaires, household and IT equipment

## USA

- Nationally Recognized Testing Laboratory (NRTL) to 29 CFR 1910.7 by OSHA
- Accredited for FDA 510(k) Third Party Review
- Conformity Assessment Body to the MRA for Medical Devices; FDA QSR Reg Inspections, FDA 510(k) Third Party Review

## Asien-Pazifik Region / Asia Pacific

- Recognized Certification Body to Electrical Products (Safety) Regulation; Hong Kong
- Konformitätsbewertungsstelle / Conformity Assessment Body to the MRA for Medical Devices; Australien / Australia
- Konformitätsbewertungsstelle / Conformity Assessment Body to the MRA for Medical Devices; Neuseeland / New Zealand

## Weltweit / Worldwide

- NCB im CB-Scheme des IECEE /  
NCB in the CB Scheme of IECEE
- ExCB im IECEx-Scheme des IECEE /  
ExCB in the IECEx Scheme of IECEE
- Zertifizierstellen durch DAKkS akkreditiert  
DE-ZE-11321-01, DE-ZM-11321-09 und DE-ZM-11321-01.  
Certification Bodies accredited by DAKkS  
DE-ZE-11321-01, DE-ZM-11321-09 and DE-ZM-11321-01.