

Level A¹

No. D 126019 0004 Rev. 00

Issued to:

PG Technology Limited
M556, 18 Yinchun Road,
Qixia District, 210028 Nanjing,
PEOPLE'S REPUBLIC OF CHINA

For the client system:

PGA-2001
Remote Terminal Unit
Software Version: V1.00
Hardware Version: PGA-2001
S/N: PGA-2001-202307210004

Issued by:

TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD
SHANGHAI BRANCH TESTING CENTER
Building D, No.2059, Duhui Road, Minhang District,
Shanghai, 201108, 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 2.0.6 with product's protocol, model and technical issue implementation conformance statements: "PGA-2001_PICS_Server_Ed2.0_V1.0", "PGA-2001_MICS_Server_Ed2.0_V1.0", "PGA-2001_TICS_Server_Ed2.0_V1.0" and product's extra information for testing: "PGA-2001_PIXIT_Server_Ed2.0_V1.0".

The following IEC 61850 conformance blocks have been tested with a positive result:

1	Basic Exchange	12a	Direct Control
2	Data Sets	12b	SBO Control
3	Substitution	12c	Enhanced Direct Control
4	Setting Group Selection	12d	Enhanced SBO Control
4+	Setting Group Definition	13	Time Synchronization
5	Unbuffered Reporting	14	File Transfer
6	Buffered Reporting		

This Certificate includes a summary of the test results as carried out at Shanghai in P.R. China with SimFlex Client Simulator Edition 2 version 3.18 with test suite version 2.0.6 and Wireshark version 3.6.7. This document has been issued for information purposes only, and the original paper copy of the TÜV SÜD Certification and Testing (China) Co., Ltd Shanghai Branch Testing Center report: No. 705002409301-00 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to TÜV SÜD by PG Technology Limited. 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, 2024-06-03



Cong WANG
Technical Certifier



Yifan WANG
Test Engineer

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

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Applicable Test Procedures from the UCA International Users Group Edition 2 Server 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, sSrvN1abcd, sSrvN4	sAssN6, sSrv6, sSrv9, sSrv10, sSrv11, sSrv12, sSrvN1e, sSrvN2, sSrvN3
2: Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
3: Substitution	sSub1, sSub2, sSub3	
4: Setting Group Selection	sSg1, sSg3, sSgN1	
4+: Setting Group Definition	sSg2, sSg4, sSg6, sSg7, sSg8, sSg10, sSg12, sSgN2, sSgN3, sSgN4, sSgN5	sSg5
5: Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp16, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, 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	sBr8, sBr10, sBr11, sBr12, sBr15
12a Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl2, sCtl13, sCtl15, sCtl16, sCtl17, sCtl18
12b: SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOns1, sSBOns2, sSBOns6	sCtl2, sCtl6, sCtl15, sCtl16, sCtl17, sCtl18, sCtl27
12c: Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl2, sCtl13, sCtl14, sCtl15, sCtl16, sCtl17, sCtl18, sCtl26
12d Enhanced SBO control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl2, sCtl6, sCtl15, sCtl16, sCtl17, sCtl18, sCtl26
13 Time sync	sTm1, sTm2, sTmN1	sTm3
14 File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	

Zertifizierungsvertrag

Grundlage für die Zertifikatserteilung ist die Prüf- und Zertifizierungsordnung der TÜV SÜD Gruppe. Mit Erhalt des Zertifikates erkennt der Zertifikatsinhaber die jeweils gültige Fassung der Prüf- und Zertifizierungsordnung an (www.tuvsud.com/ps-zert) und wird somit Partner im Zertifiziersystem der TÜV SÜD Gruppe.

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- Voraussetzungen für vorschriftsmäßige Fertigung werden eingehalten.
- Die Fertigungs- bzw. Betriebsstätten werden regelmäßig überwacht.

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Certification is based on the Testing and Certification Regulations of TÜV SÜD Group. On receipt of the certificate the certificate holder agrees to the current version of the Testing and Certification Regulations (www.tuvsud.com/ps-cert) and thus becomes partner in the Certification System of TÜV SÜD Group.

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

认证合约

认证基于 TÜV SÜD 集团《测试及认证准则》。获得证书即表明证书持有者接受当前版本的《测试及认证准则》（见 www.tuvsud.com/ps-cert）并成为 TÜV SÜD 集团认证系统内的合作伙伴。

维持证书有效性的原则要求:

- 认证所依据标准的有效性
- 此外，对于授权可使用认证标志的证书和质量管理体系证书：
- 保持充分的生产条件
 - 生产场地通过定期的监督

認証契約

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認証書の有効性に関する原則的な要求事項

- 引用している試験規格が有効である
- さらに認証マークの使用を許諾された認証書や品質マネジメント認証書は：
- 適切な製造の条件を維持している
 - 定期的な工場監査を実施している

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A certificação se baseia nos Regulamentos de Testes e Certificação do Grupo TÜV SÜD. Ao receber o certificado, o Fornecedor, titular do certificado concorda com a versão atual dos Regulamentos de Testes e Certificação do Grupo TÜV SÜD (www.tuvsud.com/ps-cert) e assim, torna-se parceiro no Sistema de Certificação do Grupo TÜV SÜD.

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- Validade da(s) norma(s) de ensaio(s) referenciada(s).
- Adicionalmente, para os certificados com o direito ao uso da marca de certificação e para certificados de SG:
- Condições de fabricação adequada estão mantidas.
 - Auditoria de monitoração realizada regularmente.