Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50376511

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0001

Ihr Zeichen *Client Reference*	Unser Zeichen *Our Reference*	Ausstellungsdatum *Date of Issue*
Jing Xie	01-CSC-50075616 002	17.04.2017 *(day/mo/yr)*

Genehmigungsinhaber *License Holder*
JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
NO. 189 Kun Lun Shan Road
Suzhou New District
Jiangsu 215163
P.R. China

Fertigungsstätte *Manufacturing Plant*
JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
NO. 189 Kun Lun Shan Road
Suzhou New District
Jiangsu 215163
P.R. China

Prüfzeichen *Test Mark*

TÜVRheinland® ZERTIFIZIERT
Bauart geprüft
Sicherheit
Regelmäßige Produktions-überwachung
www.tuv.com
ID 1419046190

Geprüft nach *Tested acc. to*
IEC 62109-1:2010
IEC 62109-2:2011
EN 62109-1:2010
EN 62109-2:2011

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV-Wechselrichter (Hybrid Inverter)

Type Designation	: GW5048-EM	GW3648-EM	GW3048-EM	10
Vmax PV [Vd.c.]	: 550			
Isc PV [Ad.c.]	: 13.8/13.8		13.8	
MPP Voltage Range [Vd.c.]	: 100-500			
Max. Input Current [Ad.c.]	: 11/11		11	
Overvoltage Category (OVC)	: II for PV			
Rated Output Volt. [Va.c.]	: 230			
Rated Output Freq. [Hz]	: 50/60			
Rated Output Power [kW]	: 5.0	3.68	3.0	
Max. Output Curr. [Aa.c.]	: 22.8	16.0	13.6	
Power Factor	: [-0.80, 0.80]			
Overvoltage Category (OVC)	: III for AC mains			

continued on page 0002

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ANLAGE (Appendix): 1.0

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

Zertifizierungsstelle

TÜV Rheinland LGA Products GmbH
TÜVRheinland®
Zertifizierungsstelle

Weichun Li

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

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Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50376511

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0002

Ihr Zeichen *Client Reference*	Unser Zeichen *Our Reference*	Ausstellungsdatum *Date of Issue*
Jing Xie	01-CSC-50075616 002	17.04.2017 *(day/mo/yr)*

Genehmigungsinhaber *License Holder*
JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
NO. 189 Kun Lun Shan Road
Suzhou New District
Jiangsu 215163
P.R. China

Fertigungsstätte *Manufacturing Plant*
JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
NO. 189 Kun Lun Shan Road
Suzhou New District
Jiangsu 215163
P.R. China

Prüfzeichen *Test Mark*

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Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV-Wechselrichter (Hybrid Inverter)

as page 0001 continuation

Protective Class	: I
Ingress Protection (IP)	: IP 65
Pollution Degree (PD)	: PD 3
Operating Temperature [°C]	: -25 to 60 (> 45 derating)
Altitude [m]	: 2000
Type of Inverter	: Non-isolated

Remark(s):
The installation has to be carried out according to the attached installation instruction.
Any additional requirements in countries where the product is going to be marketed have to be considered additionally.

ANLAGE (Appendix): 1.0

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
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Zertifizierungsstelle
TÜV Rheinland LGA Products GmbH TÜVRheinland® Zertifizierungsstelle

Weichun Li

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

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TÜV Rheinland (China) Ltd.
Member of TÜV Rheinland Group

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Precisely Right.

JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
Xie Jing
Technic Support Dept.
NO. 189 Kun Lun Shan Road
Suzhou New District
Jiangsu 215163
P.R. China

Date : 17.04.2017
Our ref. : CSC 01
Your ref.: Jing Xie

Ref : R TÜV-Mark Approval

Type of Equipment : Hybrid Inverter
Model Designation : See Certificate
Certificate No. : R 50376511 0001
Report No. : 50075616 002

Dear Xie Jing,

The above specified equipment has been tested and found to be in accordance with the relevant requirements.

Please find enclosed your certificate as specified above.

If cancellation of the certificate is submitted by 15 November in a given year, no fee will be charged for the following year.

The certificate is issued with the reservation that the license holder applies all information required in § 6 of the ProdSG related to name and address of the manufacturer or his authorized representative / importer, including their respective contact addresses on the product prior to marketing of the product in the European Economic Area.

With kind regards,

Certification Body

Weichun Li

cc: JIANGSU GOODWE POWER SUPPLY

Enclosure

证书的详细资料请登陆www.certipedia.com查阅，或拨打我司客服热线800 999 3668 / 400 883 1300咨询

TÜV Rheinland (China) Ltd.
莱茵检测认证服务（中国）有限公司
Unit 707, AVIC Bldg., No. 10B, Central Road, East 3rd Ring Road, Chaoyang District, Beijing, 100022, P.R.China
北京市朝阳区东三环中路乙10号
艾维克大厦707室
邮编：100022
Tel: (8610)6566 6660
Fax: (8610)6566 6667
e-mail: info@bj.chn.tuv.com
Internet: http://www.chn.tuv.com

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50376511

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0003

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum** *Date of Issue* (day/mo/yr)
Jing Xie	01-DJW-50075616 004	06.03.2020

Genehmigungsinhaber *License Holder*
JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
No.90 Zijin Rd.,
New District, Suzhou 215011
P. R. China

Fertigungsstätte *Manufacturing Plant*
JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
No.90 Zijin Rd.,
New District, Suzhou 215011
P. R. China

Prüfzeichen *Test Mark*

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www.tuv.com
ID 1419046190

Geprüft nach *Tested acc. to*
IEC 62109-1:2010
IEC 62109-2:2011
EN 62109-1:2010
EN 62109-2:2011

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV-Wechselrichter (Hybrid Inverter)

as page 0001-0002 continuation

Change
Address of license holder and manufacturing plant:See above.

ANLAGE (Appendix): 1.0

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle

Zertifizierungsstelle

Weichun Li

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JIANGSU GOODWE POWER SUPPLY
TECHNOLOGY CO., LTD.
Xie Jing
Technic Support Dept.
No.90 Zijin Rd.,
New District, Suzhou 215011
P. R. China

Date : 06.03.2020
Our ref. : DJW 01
Your ref.: Jing Xie

Ref : R TÜV-Mark Approval

Type of Equipment : Hybrid Inverter
Model Designation : See Certificate
Certificate No. : R 50376511 0003
Report No. : 50075616 004

Dear Xie Jing,

The above specified equipment has been tested and found to be in accordance with the relevant requirements.

Please find enclosed your certificate as specified above.

If cancellation of the certificate is submitted by 15 November in a given year, no fee will be charged for the following year.

The certificate is issued with the reservation that the license holder applies all information required in § 6 of the ProdSG related to name and address of the manufacturer or his authorized representative / importer, including their respective contact addresses on the product prior to marketing of the product in the European Economic Area.

With kind regards,

Certification Body

Weichun Li

cc: JIANGSU GOODWE POWER SUPPLY

Enclosure

TÜV Rheinland (China) Ltd.
莱茵检测认证服务（中国）有限公司
Unit 707, AVIC Bldg., No. 10B, Central Road, East 3rd Ring Road, Chaoyang District, Beijing, 100022, P.R.China
北京市朝阳区东三环中路乙10号
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Tel: (8610)6566 6660
Fax: (8610)6566 6667
e-mail: info@bj.chn.tuv.com
Internet: http://www.chn.tuv.com

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 50376511

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0004

Ihr Zeichen *Client Reference*	**Unser Zeichen** *Our Reference*	**Ausstellungsdatum** *Date of Issue*
Jing Xie	01-DJW-50075616 010	13.01.2022 *(day/mo/yr)*

Genehmigungsinhaber *License Holder*
GoodWe Technologies Co., Ltd.
No.90 Zijin Rd., New District
215011 Suzhou
P.R. China

Fertigungsstätte *Manufacturing Plant*
GoodWe Technologies Co., Ltd.
No.90 Zijin Rd., New District
215011 Suzhou
P.R. China

Prüfzeichen *Test Mark*

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IEC 62109-2:2011
EN 62109-1:2010
EN 62109-2:2011

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV-Wechselrichter (Hybrid Inverter)

as page 0003 continuation

Change
License holder and manufacturing plant:
GoodWe Technologies Co., Ltd.
No.90 Zijin Rd., New District, Suzhou, 215011, P.R. China

Add a new manufacturing plant:
GoodWe (GuangDe) Power Supply Technology Co., Ltd.

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle

Zertifizierungsstelle

Bruce Li

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935

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GoodWe Technologies Co., Ltd.
Mr. Jiang Tao

No.90 Zijin Rd., New District
215011 Suzhou
P.R. China

Date : 13.01.2022
Our ref. : DJW 01
Your ref.: Jing Xie

Ref : R TÜV-Bauart-Zeichen o. Akkred. Nr.

Type of Equipment : Hybrid Inverter
Model Designation : See Certificate
Certificate No. : R 50376511 0004
Report No. : 50075616 010

Dear Mr. Jiang Tao,

The above specified equipment has been tested and found to be in accordance with the relevant requirements.

Please find enclosed your certificate as specified above.

If cancellation of the certificate is submitted by 15 November in a given year, no fee will be charged for the following year.

The certificate is issued with the reservation that the license holder applies all information required in § 6 of the ProdSG related to name and address of the manufacturer or his authorized representative / importer, including their respective contact addresses on the product prior to marketing of the product in the European Economic Area.
In case you have a change regarding your involved local representative for the certificate, please inform us in due time.

With kind regards,

Certification Body

Bruce Li

Bruce Li

cc: GoodWe Technologies Co., Ltd.

Enclosure

证书的详细资料请登录https://www.certipedia.com查阅，或拨打我司客服热线 800 999 3668/400 883 1300 咨询

TÜV Rheinland (China) Ltd.
Room 301, 3F and Room 1203, 12F,
Building 4, No. 15, Ronghua South Road,
Beijing Economic-Technological
Development Area, Beijing
www.chn.tuv.com

莱茵检测认证服务(中国)有限公司
北京市北京经济技术开发区
荣华南路15号院4号楼3层301室
12层1203室
邮编：100176
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Tel : 86 10 8524 2222
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Hotline : 400 883 1300
800 999 3668
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传真：86 10 8524 2200
热线：400 883 1300
800 999 3668
大中华区服务邮箱：service-gc@tuv.com