

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
PV 50394846

Blatt Sheet
0024

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum Date of Issue
J.D.L.	01-QLS-50101262 031	16.06.2021 (day/mo/yr)

Genehmigungsinhaber License Holder

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
200235 Shanghai
P.R. China

Fertigungsstätte Manufacturing Plant

HT FELLOW ENERJI ANONIM SIRKETI
BASPINAR(ORGANIZE) OSB MAHALLES
I O.S.B.2.BOLGE 83221 NOLU CAD.NO:28
SEHITKAMIL/GAZIANTEP
Turkey

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

PV Module

Same as Page 1-11 & 15-17 & 20-23

Lizenzentgelte - Einheit
License Fee - Unit

Remarks:

- Additional new manufacturing plant see above.

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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>

Zertifizierungsstelle



Dipl.-Ing. (FH) Tim Kirschner

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0004

Ihr Zeichen *Client Reference*
Z.Y.N.

Unser Zeichen *Our Reference*
01-YML-50101262 004

Ausstellungsdatum *Date of Issue*
07.01.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*
Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*
CHEN GUNES ENERJISI SANAYI VE
TICARET LIMITED SIRKETI
Deri OSB Mah. Kumpas Cad.
Desen Sok. No:8 Tuzla-Istanbul
Turkey

Prüfzeichen *Test Mark*



IEC 61215
IEC 61730
Regular Production
Surveillance
www.tuv.com
ID 1419053360

Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Continuation of Page 3

4

- Additional manufacturing plant see above.

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production is subject to surveillance.



Zertifizierungsstelle

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>

Dipl.-Ing. (TU) G. Reimann

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0003

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum <i>Date of Issue</i>
Z.Y.N.	01-YML-50101262 004	07.01.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*
Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*
HT SOLAR ENERJI A.S.
Industry and Trade Free Zone
Aydinli SB. Dist. 1.Street No:1
34957 Tuzla/Istanbul
Turkey

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Same as Page 1-2

4

In addition:

Type Designation:

With 6" mono c-Si cells:

HT50-156M-xxx (xxx=235-250, in steps of 5, 50 cells)

With 6" poly c-Si cells:

HT50-156P-xxx (xxx=220-235, in steps of 5, 50 cells)

Remarks:

- Additional manufacturing plant see above.

Continued on Page 4

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production is subject to surveillance.



Zertifizierungsstelle

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

Dipl.-Ing. (TU) G. Reimann

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0023

Ihr Zeichen *Client Reference*
J.D.L.

Unser Zeichen *Our Reference*
01-QLS-50101262 027

Ausstellungsdatum *Date of Issue*
22.02.2021
(day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
200235 Shanghai
P.R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100
P.R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Same as Page 1-11 & 15-17 & 20-22

In addition:

Type Designations:

Max. system voltage (Up to 1500VDC)

With 1/2 cut of mono c-Si cells:

HT72-166M-xxx (xxx=455-460, in steps of 5, 144 cells)

HT66-166M-xxx (xxx=375-420, in steps of 5, 132 cells)

HT60-166M-xxx (xxx=380, 120 cells)

HT48-166M-xxx (xxx=305, 96 cells)

HT30-166M-xxx (xxx=190, 60 cells)

HT78-18X-xxx (xxx=560-615, in steps of 5, 156 cells)

HT72-18X-xxx (xxx=520-565, in steps of 5, 144 cells)

HT66-18X-xxx (xxx=475-520, in steps of 5, 132 cells)

HT60-18X-xxx (xxx=435-470, in steps of 5, 120 cells)

HT54-18X-xxx (xxx=390-425, in steps of 5, 108 cells)

HT36-18X-xxx (xxx=260-280, in steps of 5, 72 cells)

HT32-18X-xxx (xxx=230-250, in steps of 5, 64 cells)

HT30-18X-xxx (xxx=220-235, in steps of 5, 60 cells)

HT20-18X-xxx (xxx=145-155, in steps of 5, 40 cells)

HT16-18X-xxx (xxx=115-125, in steps of 5, 32 cells)

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.

Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.

This certificate is based on our Testing and Certification Regulation. The product fulfills above mentioned requirements, the production 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

Zertifizierungsstelle



Dipl.-Ing. (FH) Tim Kirschner

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu

Date : 16.06.2021
Our ref. : QLS 01
Your ref.: J.D.L.

222 Caoxi Rd, the 8th Floor of
Spaceflight Building
200235 Shanghai
P.R. China

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0024
Report No. : 50101262 031

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

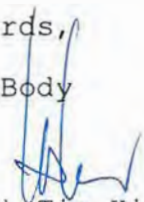
Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Dipl.-Ing. (FH) Tim Kirschner

cc: Shanghai Aerospace Automobile

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

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu

Date : 22.02.2021
Our ref. : QLS 01
Your ref.: J.D.L.

222 Caoxi Rd, the 8th Floor of
Spaceflight Building
200235 Shanghai
P.R. China

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0023
Report No. : 50101262 027

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Dipl.-Ing. (FH) Tim Kirschner

cc: Shanghai Aerospace Automobile

Enclosure

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

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Han Kaimin

Date : 05.12.2017
Our ref. : LND 01
Your ref.: H.K.M

—
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Ref : PV Photovoltaic Modules

Type of Equipment : PV-Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0001
Report No. : 50101262 001

Dear Han Kaimin,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body



Dipl.-Ing. D. Löffler

cc: Shanghai Aerospace Automobile

Enclosure

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Zertifikat

Certificate



Zertifikat Nr. Certificate No.
PV 50394846

Blatt Page
0001

Ihr Zeichen Client Reference
H. K. M

Unser Zeichen Our Reference
01-LND-50101262 001

Ausstellungsdatum Date of Issue
05.12.2017 (day/mo/yr)

Genehmigungsinhaber License Holder

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte Manufacturing Plant

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation) Certified Product (Product Identification)

Lizenzentgelte - Einheit License Fee - Unit

PV-Module

Type Designation:

With 6" poly cells:

HT72-156P-xxx (xxx=320-340, in steps of 5, 72 cells)

HT60-156P-xxx (xxx=265-280, in steps of 5, 60 cells)

HT48-156P-xxx (xxx=210-230, in steps of 5, 48 cells)

With 6" mono cells:

HT72-156M-xxx (xxx=340-360, in steps of 5, 72 cells)

HT60-156M-xxx (xxx=285-300, in steps of 5, 60 cells)

HT48-156M-xxx (xxx=225-240, in steps of 5, 48 cells)

Remarks:

Class II acc. to IEC 61140

Max. System Voltage: up to 1000 VDC (Voc at STC)

Fire Rating: Class C

Design Load/ Safety Factors: 2400 Pa / 1.5 (Rear)

2400 Pa / 1.5 (Front)

Continued on Page 2

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Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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

Zertifizierungsstelle



Dipl.-Ing. D. Löffler

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
PV 50394846

Blatt Page
0002

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum Date of Issue
H.K.M	01-LND-50101262 001	05.12.2017 (day/mo/yr)

Genehmigungsinhaber License Holder

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte Manufacturing Plant

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen Test Mark



IEC 61215
IEC 61730
Regular Production
Surveillance

www.tuv.com
ID 1419053360

Geprüft nach Tested acc. to

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV-Module

Continuation of Page 1

4

Conditions:

The product test is voluntarily according to technical regulations. Any change of the design, materials, components or processing may require the repetition of some of the qualification tests in order to retain type approval.
Validity: 5 years counting from date of issue.

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
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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



Dipl.-Ing. D. Löffler

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Zhang Yanan
—
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Date : 07.01.2019
Our ref. : YML 01
Your ref.: Z.Y.N.

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0003
Report No. : 50101262 004

Dear Mr. Zhang Yanan,

Thank you very much for your interest in our services.

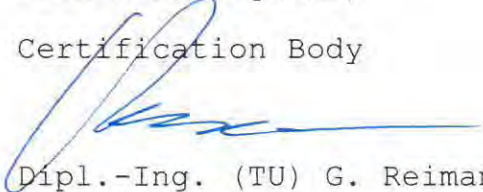
Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Dipl.-Ing. (TU) G. Reimann

cc: Shanghai Aerospace Automobile

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

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Zhang Yanan

Date : 07.01.2019
Our ref. : YML 01
Your ref.: Z.Y.N.

222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0005
Report No. : 50101262 005

Dear Mr. Zhang Yanan,

Thank you very much for your interest in our services.

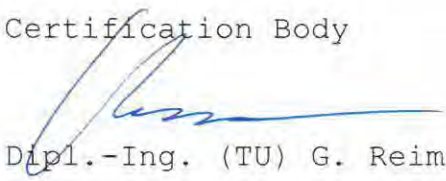
Please find enclosed your certification documents.

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With kind regards,

Certification Body


Dipl.-Ing. (TU) G. Reimann

cc: Shanghai Aerospace Automobile

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Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0005

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum <i>Date of Issue</i>
Z.Y.N.	01-YML-50101262 005	07.01.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

PV Module

Same as Page 1-4

4

In addition:

Type Designation:

With 1/2 cut of 6" mono c-Si cells:

HT72-156M-C-xxx (xxx=350-385, in steps of 5, 144 cells)

HT60-156M-C-xxx (xxx=290-320, in steps of 5, 120 cells)

With 1/2 cut of 6" poly c-Si cells:

HT72-156P-C-xxx (xxx=325-335, in steps of 5, 144 cells)

With 6" poly cells:

HT72-156P-xxx (xxx=345-350, in steps of 5, 72 cells)

HT60-156P-xxx (xxx=285-290, in steps of 5, 60 cells)

HT48-156P-xxx (xxx=235, in steps of 5, 48 cells)

With 6" mono cells:

HT72-156M-xxx (xxx=365-380, in steps of 5, 72 cells)

HT60-156M-xxx (xxx=305-315, in steps of 5, 60 cells)

HT48-156M-xxx (xxx=245-255, in steps of 5, 48 cells)



4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
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This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production is subject to surveillance.

Zertifizierungsstelle

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

Dipl.-Ing. (TU) G. Reimann

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Zhang Yanan

Date : 30.01.2019
Our ref. : YML 01
Your ref.: Z.Y.N.

222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0006
Report No. : 50101262 006

Dear Mr. Zhang Yanan,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body



Dipl.-Ing. D. Löffler

cc: Shanghai Aerospace Automobile

Enclosure

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Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0006

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum <i>Date of Issue</i>
Z.Y.N.	01-YML-50101262 006	30.01.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

PV Module

Same as Page 1-5

4

In addition:

Type Designations:

With 1/2 cut of 6" poly c-Si cells:

HT60-156P-C-xxx (xxx=270-295, in steps of 5, 120 cells)

HT72-156P-C-xxx (xxx=340-355, in steps of 5, 144 cells)

With 6" mono c-Si cells:

HT50-156M-xxx (xxx=255-260, in steps of 5, 50 cells)

With 6" poly c-Si cells:

HT50-156P-xxx (xxx=240, 50 cells)

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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

Zertifizierungsstelle



Dipl.-Ing. D. Löffler

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu
-
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Date : 24.06.2019
Our ref. : LCH 01
Your ref.: J.D.L.

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0007
Report No. : 50101262 010

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

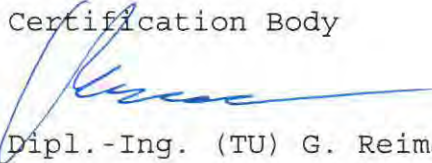
Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Dipl.-Ing. (TU) G. Reimann

cc: Shanghai Aerospace Automobile

Enclosure

证书的详细信息请登陆www.tuvdotcom.com查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0007

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum <i>Date of Issue</i>
J.D.L.	01-LCH-50101262 010	24.06.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Same as Page 1-6

4

In addition:

Type Designations:

With 6" poly cells:

HT72-156P-M-xxx (xxx=310-330, in steps of 5, 72 cells)

HT60-156P-M-xxx (xxx=260-275, in steps of 5, 60 cells)

HT50-156P-M-xxx (xxx=215-225, in steps of 5, 50 cells)

HT48-156P-M-xxx (xxx=210-220, in steps of 5, 48 cells)

With 6" mono cells:

HT72-156M-M-xxx (xxx=355-385, in steps of 5, 72 cells)

HT60-156M-M-xxx (xxx=300-320, in steps of 5, 60 cells)

HT50-156M-M-xxx (xxx=250-265, in steps of 5, 50 cells)

HT48-156M-M-xxx (xxx=240-255, in steps of 5, 48 cells)

Continued on Page 8



4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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

Zertifizierungsstelle

Dipl.-Ing. (TU) G. Reimann

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0008

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum	<i>Date of Issue</i>
J.D.L.	01-LCH-50101262 010	24.06.2019	(day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

PV Module

Continuation of Page 7

4

With 1/2 cut of 6" mono cells:

HT72-156M-MC-xxx (xxx=350-375, in steps of 5, 144 cells)

HT60-156M-MC-xxx (xxx=295-310, in steps of 5, 120 cells)

With 1/2 cut of 6" poly cells:

HT72-156P-MC-xxx (xxx=315-340, in steps of 5, 144 cells)

HT60-156P-MC-xxx (xxx=265-280, in steps of 5, 120 cells)

Remarks:

- All module types listed on Page 1-8 fulfill the above
test requirements.

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
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Zertifizierungsstelle

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

Dipl.-Ing. (TU) G. Reimann

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu

Date : 28.06.2019
Our ref. : LCH 01
Your ref.: J.D.L.

222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0009
Report No. : 50101262 011

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

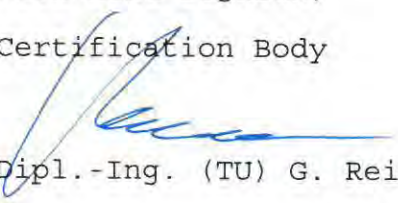
Please find enclosed your certification documents.

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Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Dipl.-Ing. (TU) G. Reimann

cc: Shanghai Aerospace Automobile

Enclosure

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Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0009

Ihr Zeichen *Client Reference*
J.D.L.

Unser Zeichen *Our Reference*
01-LCH-50101262 011

Ausstellungsdatum
28.06.2019

Date of Issue
(day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Same as Page 1-8

4

In addition:

Type Designations:

With 6" poly cells:

HT72-156P-xxx (xxx=355-360, in steps of 5, 72 cells)

HT60-156P-xxx (xxx=295-300, in steps of 5, 60 cells)

HT50-156P-xxx (xxx=245-250, in steps of 5, 50 cells)

HT48-156P-240 (48 cells)

With 6" mono cells:

HT72-156M-xxx (xxx=385-390, in steps of 5, 72 cells)

HT60-156M-xxx (xxx=320-325, in steps of 5, 60 cells)

HT50-156M-xxx (xxx=265-270, in steps of 5, 50 cells)

HT48-156M-260 (48 cells)

With 1/2 cut of 6" poly cells:

HT72-156P-C-xxx (xxx=360-365, in steps of 5, 144 cells)

HT60-156P-C-300 (120 cells)



Zertifizierungsstelle

Dipl.-Ing. (TU) G. Reimann

*Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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>

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu
-
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Date : 08.08.2019
Our ref. : LCH 01
Your ref.: J.D.L.

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0010
Report No. : 50101262 012

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

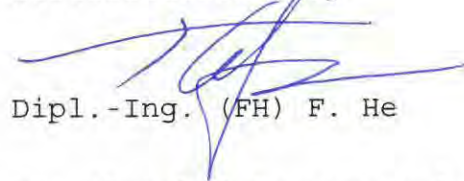
Please find enclosed your certification documents.

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Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body



Dipl.-Ing. (FH) F. He

cc: Shanghai Aerospace Automobile

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Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

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0010

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum <i>Date of Issue</i>
J.D.L.	01-LCH-50101262 012	08.08.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

PV Module

Same as Page 1-9

4

In addition:

Type Designations:

With 1/2 cut of 6" mono c-Si cells:

HT72-156M-C-390 (144 cells)

HT60-156M-C-325 (120 cells)

HT72-156M-MC-xxx (xxx=380-395, in steps of 5, 144 cells)

HT60-156M-MC-xxx (xxx=315-325, in steps of 5, 120 cells)

With 6" mono cells:

HT72-156M-M-xxx (xxx=390-395, in steps of 5, 72 cells)

HT60-156M-M-325 (60 cells)

HT50-156M-M-270 (50 cells)

HT48-156M-M-260 (48 cells)

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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

Zertifizierungsstelle



Dipl.-Ing. (FH) F. He

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu
-
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Date : 24.10.2019
Our ref. : LCH 01
Your ref.: J.D.L.

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0011
Report No. : 50101262 013

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Dipl.-Ing. (FH) Tim Kirschner

cc: Shanghai Aerospace Automobile

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Zertifikat

Certificate



Zertifikat Nr. Certificate No.
PV 50394846

Blatt Sheet
0011

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum Date of Issue
J.D.L.	01-LCH-50101262 013	24.10.2019 (day/mo/yr)

Genehmigungsinhaber License Holder

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte Manufacturing Plant

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation) Certified Product (Product Identification)

PV Module

Same as Page 1-10

Lizenzentgelte - Einheit License Fee - Unit

4

In addition:

Type Designations:

With 1/2 cut of 6" mono c-Si cells:

HT72-156M-C-xxx (xxx=395-410, in steps of 5, 144 cells)

HT60-156M-C-xxx (xxx=330-340, in steps of 5, 120 cells)

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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



Dipl.-Ing. (FH) Tim Kirschner

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu
-
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Date : 28.02.2020
Our ref. : LCH 01
Your ref.: J.D.L.

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0015
Report No. : 50101262 017

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body



Dipl.-Ing. (FH) Tim Kirschner

cc: Shanghai Aerospace Automobile

Enclosure

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Zertifikat

Certificate



Zertifikat Nr. Certificate No.
PV 50394846

Blatt Sheet
0015

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum Date of Issue
J.D.L.	01-LCH-50101262 017	28.02.2020 (day/mo/yr)

Genehmigungsinhaber License Holder

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte Manufacturing Plant

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation) Certified Product (Product Identification)

Lizenzentgelte - Einheit License Fee - Unit

PV Module

Same as Page 1-14

In addition:

Type Designations:

For 1500V maximum system voltage

With 6" poly c-Si cells:

HT72-156P(V)-xxx (xxx=320-360, in steps of 5, 72 cells)
HT60-156P(V)-xxx (xxx=265-300, in steps of 5, 60 cells)
HT50-156P(V)-xxx (xxx=220-250, in steps of 5, 50 cells)
HT48-156P(V)-xxx (xxx=210-240, in steps of 5, 48 cells)
HT72-156P(V)-M-xxx (xxx=310-330, in steps of 5, 72 cells)
HT60-156P(V)-M-xxx (xxx=260-275, in steps of 5, 60 cells)
HT50-156P(V)-M-xxx (xxx=215-225, in steps of 5, 50 cells)
HT48-156P(V)-M-xxx (xxx=210-220, in steps of 5, 48 cells)

With 6" mono c-Si cells:

HT72-156M(V)-xxx (xxx=340-390, in steps of 5, 72 cells)
HT60-156M(V)-xxx (xxx=285-325, in steps of 5, 60 cells)
HT50-156M(V)-xxx (xxx=235-270, in steps of 5, 50 cells)

Continued on Page 16

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
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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



Dipl.-Ing. (FH) Tim Kirschner

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0016

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum <i>Date of Issue</i>
J.D.L.	01-LCH-50101262 017	28.02.2020 (day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV Module

Continuation of Page 15

4

HT48-156M(V)-xxx (xxx=225-260, in steps of 5, 48 cells)
HT72-156M(V)-M-xxx (xxx=355-395, in steps of 5, 72 cells)
HT60-156M(V)-M-xxx (xxx=300-325, in steps of 5, 60 cells)
HT50-156M(V)-M-xxx (xxx=250-270, in steps of 5, 50 cells)
HT48-156M(V)-M-xxx (xxx=240-260, in steps of 5, 48 cells)
With 1/2 cut of 6" mono c-Si cells:
HT72-156M(V)-MC-xxx
(xxx=350-395, in steps of 5, 144 cells)
HT60-156M(V)-MC-xxx
(xxx=295-325, in steps of 5, 120 cells)
HT72-156M(V)-C-xxx (xxx=350-410, in steps of 5, 144 cells)
HT60-156M(V)-C-xxx (xxx=290-340, in steps of 5, 120 cells)
With 1/2 cut of 6" poly c-Si cells:
HT72-156P(V)-MC-xxx
(xxx=315-340, in steps of 5, 144 cells)

Continued on Page 17

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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



Dipl.-Ing. (FH) Tim Kirschner

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
PV 50394846

Blatt Sheet
0017

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum Date of Issue
J.D.L.	01-LCH-50101262 017	28.02.2020 (day/mo/yr)

Genehmigungsinhaber License Holder

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
Shanghai 200235
P. R. China

Fertigungsstätte Manufacturing Plant

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100,
P. R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation) Certified Product (Product Identification)

Lizenzentgelte - Einheit License Fee - Unit

PV Module

Continuation of Page 16

HT60-156P(V)-MC-xxx

(xxx=265-280, in steps of 5, 120 cells)

HT72-156P(V)-C-xxx (xxx=325-365, in steps of 5, 144 cells)

HT60-156P(V)-C-xxx (xxx=270-300, in steps of 5, 120 cells)

Remarks:

Fire Rating: Class C according to UL 790.

This certificate PV 50394846 Page 12-14 is replaced by
PV 50394846 Page 15-17.

4

4

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde.
Das Produkt entspricht den o.g. Anforderungen, die Herstellung wird überwacht.
This certificate is based on our Testing and Certification Regulation. The product
fulfills above mentioned requirements, the production 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



Dipl.-Ing. (FH) Tim Kirschner

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
PV 50394846

Blatt *Sheet*
0020

Ihr Zeichen *Client Reference*
J.D.L.

Unser Zeichen *Our Reference*
01-QLS-50101262 023

Ausstellungsdatum *Date of Issue*
09.09.2020 (day/mo/yr)

Genehmigungsinhaber *License Holder*

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
222 Caoxi Rd, the 8th Floor of
Spaceflight Building
200235 Shanghai
P.R. China

Fertigungsstätte *Manufacturing Plant*

Lianyungang Shenzhou New
Energy Co., Ltd.
No.8 Xiamen Road,
Ganyu Economic Development Zone
Lianyungang, Jiangsu 222100
P.R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-2:2018

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

PV Module

Same as Page 1-11 & 15-19

4

In addition:

Type Designations:

For 1500V maximum system voltage

With mono c-Si cells:

HT72-166M-xxx (xxx=410-450, in steps of 5, 144 cells)

HT60-166M-xxx (xxx=345-375, in steps of 5, 120 cells)

4

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Zertifizierungsstelle



Dipl.-Ing. (FH) Tim Kirschner

Shanghai Aerospace Automobile
Electromechanical Co., Ltd.
Mr. Jia Dong Liu

Date : 09.09.2020
Our ref. : QLS 01
Your ref.: J.D.L.

222 Caoxi Rd, the 8th Floor of
Spaceflight Building
200235 Shanghai
P.R. China

Ref : PV Photovoltaic Modules

Type of Equipment : PV Module
Model Designation : See Certificate
Certificate No. : PV 50394846 0020
Report No. : 50101262 023

Dear Mr. Jia Dong Liu,

Thank you very much for your interest in our services.

Please find enclosed your certification documents.

We appreciate your support and would like to offer our assistance in the approval of your future products through our extensive range of technical services.

Please feel free to contact us whatever your requirements may be.

With kind regards,

Certification Body


Dipl.-Ing. (FH) Tim Kirschner

cc: Shanghai Aerospace Automobile

Enclosure

证书的详细信息请登陆www.tuvdotcom.com查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询