



Product Service

Attestation of Conformity

No. N8A 086674 0011 Rev. 06

Holder of Attestation: **Shanghai Aerospace Automobile
Electromechanical Co., Ltd.**
 222 Caoxi Rd, the 8th Floor of Spaceflight Building
 200235 Shanghai
 PEOPLE'S REPUBLIC OF CHINA

Product: **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**
Mono-Crystalline Silicon Photovoltaic Module

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive and is based on the technical specifications applicable at the time of issuance. It refers only to the particular sample submitted for conformity assessment. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062003509-08

Date, 2024-12-09

(Zhulin Zhang)

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This Attestation does not replace the regulatory EU Declaration of Conformity (DoC) and does not allow for CE marking. After preparation of the necessary documentation and establishing compliance to requirements of all applicable directives, the manufacturer may sign a DoC and apply the CE marking. The DoC is issued under the sole responsibility of the manufacturer.



Product Service

Attestation of Conformity

No. N8A 086674 0011 Rev. 06

Model(s):

HT72-156M(PD)-xxx, HT72-156M(PD)-F-xxx (xxx=375-390, in step of 5);
 HT60-156M(PD)-xxx, HT60-156M(PD)-F-xxx (xxx=310-325, in step of 5);
 HT48-156M(PD)-xxx, HT48-156M(PD)-F-xxx (xxx=250-260, in step of 5);
 HT72-156M(PD)-B-xxx, HT72-156M(PD)-BF-xxx (xxx=365-390, in step of 5);
 HT60-156M(PD)-B-xxx, HT60-156M(PD)-BF-xxx (xxx=300-325, in step of 5);
 HT48-156M(PD)-B-xxx, HT48-156M(PD)-BF-xxx (xxx=240-260, in step of 5);
 HT72-156M(PD)-MCB-xxx, HT72-156M(PD)-MCBF-xxx
 (xxx=390-410, in step of 5);
 HT60-156M(PD)-MCB-xxx, HT60-156M(PD)-MCBF-xxx
 (xxx=325-340, in step of 5);
 HT72-166M(PD)-xxx, HT72-166M(PD)-F-xxx
 (xxx=430-470, in step of 5);
 HT60-166M(PD)-xxx, HT60-166M(PD)-F-xxx
 (xxx=360-390, in step of 5);
 HT48-166M(PD)-xxx, HT48-166M(PD)-F-xxx
 (xxx=290-310, in step of 5);
 HT44-166M(PD)-xxx, HT44-166M(PD)-F-xxx
 (xxx=265-285, in step of 5);
 HT40-166M(PD)-xxx, HT40-166M(PD)-F-xxx, (xxx=240-260, in step of 5);
 HT36-166M(PD)-xxx, HT36-166M(PD)-F-xxx, (xxx=215-230, in step of 5).
 HT32-166M(PD)-xxx, HT32-166M(PD)-F-xxx, (xxx=195-205, in step of 5);
 HT72-158M(ND)-F-xxx, HT72-158M(ND)-xxx, (xxx=430)
 HT60-158M(ND)-F-xxx, HT60-158M(ND)-xxx, (xxx=355)
 HT78-18X(PD)-xxx, HT78-18X(PD)-F-xxx (xxx=570-610, in step of 5);
 HT72-18X(PD)-xxx, HT72-18X(PD)-F-xxx (xxx=530-560, in step of 5);
 HT66-18X(PD)-xxx, HT66-18X(PD)-F-xxx (xxx=485-515, in step of 5);
 HT60-18X(PD)-xxx, HT60-18X(PD)-F-xxx (xxx=440-465, in step of 5);
 HT54-18X(PD)-xxx, HT54-18X(PD)-F-xxx (xxx=395-420, in step of 5);
 HT48-18X(PD)-xxx, HT48-18X(PD)-F-xxx (xxx=350-375, in step of 5);
 HT40-18X(PD)-xxx, HT40-18X(PD)-F-xxx (xxx=295-310, in step of 5);
 HT36-18X(PD)-xxx, HT36-18X(PD)-F-xxx (xxx=265-280, in step of 5);
 HT32-18X(PD)-xxx, HT32-18X(PD)-F-xxx (xxx=235-250, in step of 5);
 HT72-18X(ND)-xxx, HT72-18X(ND)-F-xxx (xxx=550-600, in step of 5);
 HT66-18X(ND)-xxx, HT66-18X(ND)-F-xxx (xxx=505-550, in step of 5);
 HT60-18X(ND)-xxx, HT60-18X(ND)-F-xxx (xxx=460-500, in step of 5);
 HT54-18X(ND)-xxx, HT54-18X(ND)-F-xxx (xxx=415-450, in step of 5);
 HT48-18X(ND)-xxx, HT48-18X(ND)-F-xxx (xxx=370-400, in step of 5);
 HT40-18X(ND)-xxx, HT40-18X(ND)-F-xxx (xxx=310-330, in step of 5);
 HT36-18X(ND)-xxx, HT36-18X(ND)-F-xxx (xxx=275-300, in step of 5);
 HT32-18X(ND)-xxx, HT32-18X(ND)-F-xxx (xxx=245-265, in step of 5);
 HT66-18X(ND)-F-xxx, HT66-18X(ND)-F-xxx (xxx=590-630, in step of 5);
 HT54-18X(ND)-F-xxx, HT54-18X(ND)-F-xxx (xxx=480-515, in step of 5);
 HT48-18X(ND)-F-xxx, HT48-18X(ND)-F-xxx (xxx=430-460, in step of 5);
 HT66-210(PD)-F-xxx (xxx=640-670, in step of 5);
 HT60-210(PD)-F-xxx (xxx=585-605, in step of 5);
 HT32-210(PD)-F-xxx (xxx=310-320, in step of 5).
 xxx is standing for rated output power at STC.

Parameters:

Safety Class:	Class II
Max. System Voltage:	1500V DC
Test Laboratory:	Changzhou HuaYang Inspection and Testing Technology Co., Ltd. No.8 Lanxiang Road, Wujin Economic Development Zone Changzhou, Jiangsu, China.
Construction:	Framed and frameless, with Junction box, cable and connector.
Fire Safety Class:	Class A or Class C according to UL790

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This Attestation does not replace the regulatory EU Declaration of Conformity (DoC) and does not allow for CE marking. After preparation of the necessary documentation and establishing compliance to requirements of all applicable directives, the manufacturer may sign a DoC and apply the CE marking. The DoC is issued under the sole responsibility of the manufacturer.



Product Service

Attestation of Conformity

No. N8A 086674 0011 Rev. 06

**Tested
according to:**

EN IEC 61730-1:2018
 EN IEC 61730-1:2018/AC:2018-06
 EN IEC 61730-2:2018
 EN IEC 61730-2:2018/AC:2018-06

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This Attestation does not replace the regulatory EU Declaration of Conformity (DoC) and does not allow for CE marking. After preparation of the necessary documentation and establishing compliance to requirements of all applicable directives, the manufacturer may sign a DoC and apply the CE marking. The DoC is issued under the sole responsibility of the manufacturer.



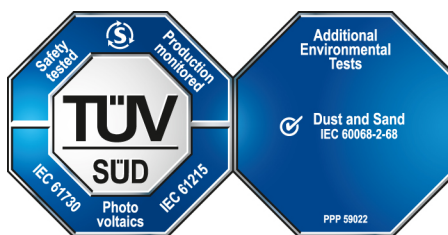
Product Service

CERTIFICATE

No. Z2 086674 0023 Rev. 00

Holder of Certificate: **Shanghai Aerospace Automobile Electromechanical Co., Ltd.**
222 Caoxi Rd, the 8th Floor of Spaceflight Building
200235 Shanghai
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**
Mono-crystalline Silicon Photovoltaic Module

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062310607-00

Valid until: 2028-12-19

Date, 2023-12-20


(Zhulin Zhang)

CERTIFICATE

No. Z2 086674 0023 Rev. 00

Model(s):

HT78-18X-xxx (xxx=560-610 in step of 5);
HT72-18X-xxx (xxx=520-560 in step of 5);
HT66-18X-xxx (xxx=475-515 in step of 5);
HT60-18X-xxx (xxx=435-465 in step of 5);
HT54-18X-xxx (xxx=390-420 in step of 5);
HT36-18X-xxx (xxx=260-280 in step of 5);
HT32-18X-xxx (xxx=230-250 in step of 5);
HT30-18X-xxx (xxx=220-230 in step of 5);
HT20-18X-xxx (xxx=145-155 in step of 5);
HT16-18X-xxx (xxx=115-125 in step of 5).
xxx is standing for rated output power at STC.

Parameters:

Safety Class:	Class II
Max. System Voltage:	1500 V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class C according to UL790
Dust and Sand Test Method:	IEC 60068-2-68, Lc1

Tested according to:

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
PPP 59022B:2021



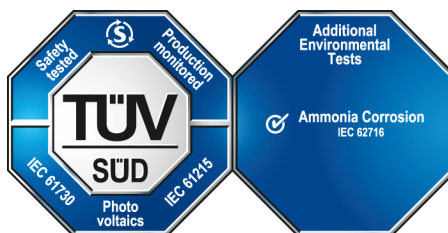
Product Service

CERTIFICATE

No. Z2 086674 0016 Rev. 05

Holder of Certificate: **Shanghai Aerospace Automobile Electromechanical Co., Ltd.**
222 Caoxi Rd, the 8th Floor of Spaceflight Building
200235 Shanghai
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**
Mono-Crystalline Silicon Photovoltaic Module

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the Testing, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062003506-05

Valid until: 2029-06-26

Date, 2024-06-27


(Zhulin Zhang)

CERTIFICATE

No. Z2 086674 0016 Rev. 05

Model(s):

HT72-156M(PD)-MCBF-xxx, (xxx=390-410, in step of 5);
HT60-156M(PD)-MCBF-xxx, (xxx=325-340, in step of 5);
HT72-166M(PD)-F-xxx, (xxx=430-470, in step of 5);
HT60-166M(PD)-F-xxx, (xxx=360-390, in step of 5);
HT48-166M(PD)-F-xxx, (xxx=290-310, in step of 5);
HT44-166M(PD)-F-xxx, (xxx=265-285, in step of 5);
HT40-166M(PD)-F-xxx, (xxx=240-260, in step of 5);
HT36-166M(PD)-F-xxx, (xxx=215-230, in step of 5);
HT32-166M(PD)-F-xxx, (xxx=195-205, in step of 5);
HT78-18X(PD)-F-xxx (xxx=570-610, in step of 5);
HT72-18X(PD)-F-xxx (xxx=530-560, in step of 5);
HT66-18X(PD)-F-xxx (xxx=485-515, in step of 5);
HT60-18X(PD)-F-xxx (xxx=440-465, in step of 5);
HT54-18X(PD)-F-xxx (xxx=395-420, in step of 5);
HT48-18X(PD)-F-xxx (xxx=350-375, in step of 5);
HT40-18X(PD)-F-xxx (xxx=295-310, in step of 5);
HT36-18X(PD)-F-xxx (xxx=265-280, in step of 5);
HT32-18X(PD)-F-xxx (xxx=235-250, in step of 5);
HT72-18X(ND)-F-xxx (xxx=550-595, in step of 5);
HT66-18X(ND)-F-xxx (xxx=505-545, in step of 5);
HT60-18X(ND)-F-xxx (xxx=460-495, in step of 5);
HT54-18X(ND)-F-xxx (xxx=415-445, in step of 5);
HT48-18X(ND)-F-xxx (xxx=370-395, in step of 5);
HT40-18X(ND)-F-xxx (xxx=310-330, in step of 5);
HT36-18X(ND)-F-xxx (xxx=275-295, in step of 5);
HT32-18X(ND)-F-xxx (xxx=245-260, in step of 5);
HT66-210(PD)-F-xxx (xxx=640-670, in step of 5);
HT60-210(PD)-F-xxx (xxx=585-605, in step of 5);
HT32-210(PD)-F-xxx (xxx=310-320, in step of 5).
xxx is standing for rated output power at STC.

Parameters:

Safety Class:	Class II
Max. system voltage:	1500V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class A according to UL790.

Tested according to:

IEC 61215-1(ed.1)
IEC 61215-1-1(ed.1)
IEC 61215-2(ed.1)
IEC 61730-1(ed.2)
IEC 61730-2(ed.2)
IEC 62716(ed.1)



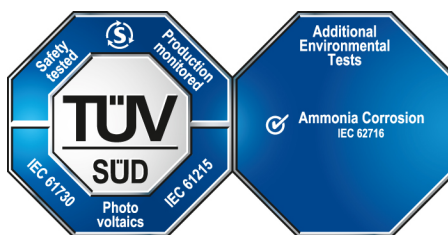
Product Service

CERTIFICATE

No. Z2 086674 0008 Rev. 04

Holder of Certificate: **Shanghai Aerospace Automobile Electromechanical Co., Ltd.**
222 Caoxi Rd, the 8th Floor of Spaceflight Building
200235 Shanghai
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product: **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**
Mono & Poly-Crystalline Silicon Photovoltaic Module

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704061913216-04

Valid until: 2028-03-01

Date, 2023-03-03

(Zhulin Zhang)

CERTIFICATE

No. Z2 086674 0008 Rev. 04

Model(s):

Poly series:

HT72-156P-xxx (xxx=320-360, in step of 5);
 HT60-156P-xxx (xxx=265-300, in step of 5);
 HT50-156P-xxx (xxx=220-250, in step of 5);
 HT48-156P-xxx (xxx=210-240, in step of 5);
 HT72-156P-M-xxx (xxx=310-330, in step of 5);
 HT60-156P-M-xxx (xxx=260-275, in step of 5);
 HT50-156P-M-xxx (xxx=215-225, in step of 5);
 HT48-156P-M-xxx (xxx=210-220, in step of 5);
 HT72-156P-MC-xxx (xxx=315-340, in step of 5);
 HT60-156P-MC-xxx (xxx=265-280, in step of 5);
 HT72-156P-C-xxx (xxx=325-365, in step of 5);
 HT60-156P-C-xxx (xxx=270-300, in step of 5);

Mono series:

HT72-156M-xxx (xxx=340-405, in step of 5);
 HT60-156M-xxx (xxx=285-335, in step of 5);
 HT50-156M-xxx (xxx=235-280, in step of 5);
 HT48-156M-xxx (xxx=225-270, in step of 5);
 HT72-156M-M-xxx (xxx=355-410, in step of 5);
 HT60-156M-M-xxx (xxx=300-340, in step of 5);
 HT50-156M-M-xxx (xxx=250-280, in step of 5);
 HT48-156M-M-xxx (xxx=240-270, in step of 5);
 HT72-156M-MC-xxx (xxx=350-415, in step of 5);
 HT60-156M-MC-xxx (xxx=295-345, in step of 5);
 HT72-156M-C-xxx (xxx=350-410, in step of 5);
 HT60-156M-C-xxx (xxx=290-340, in step of 5);
 HT72-166M-xxx (xxx=410-475, in step of 5);
 HT66-166M-xxx (xxx=380-435, in step of 5);
 HT60-166M-xxx (xxx=345-395, in step of 5);
 HT48-166M-xxx (xxx=275-315, in step of 5);
 HT32-166M-xxx (xxx=185-210, in step of 5);
 HT30-166M-xxx (xxx=175-195, in step of 5);
 HT78-18X-xxx (xxx=560-610, in step of 5);
 HT72-18X-xxx (xxx=520-560, in step of 5);
 HT66-18X-xxx (xxx=475-515, in step of 5);
 HT60-18X-xxx (xxx=435-465, in step of 5);
 HT54-18X-xxx (xxx=390-420, in step of 5);
 HT36-18X-xxx (xxx=260-280, in step of 5);
 HT32-18X-xxx (xxx=230-250, in step of 5);
 HT30-18X-xxx (xxx=220-230, in step of 5);
 HT20-18X-xxx (xxx=145-155, in step of 5);
 HT16-18X-xxx (xxx=115-125, in step of 5);
 HT72-18X(N)-xxx (xxx=555-585, in step of 5);
 HT66-18X(N)-xxx (xxx=510-535, in step of 5);
 HT60-18X(N)-xxx (xxx=465-485, in step of 5);
 HT54-18X(N)-xxx (xxx=420-440, in step of 5);
 HT36-18X(N)-xxx (xxx=280-290, in step of 5);
 HT32-18X(N)-xxx (xxx=250-260, in step of 5);
 HT30-18X(N)-xxx (xxx=235-240, in step of 5);
 HT20-18X(N)-xxx (xxx=155-160, in step of 5);
 HT16-18X(N)-xxx (xxx=125-130, in step of 5);
 HT66-210-xxx (xxx=640-670, in step of 5);
 HT60-210-xxx (xxx=585-605, in step of 5);
 HT32-210-xxx (xxx=310-320, in step of 5).

xxx is standing for rated output power at STC.

CERTIFICATE

No. Z2 086674 0008 Rev. 04

Parameters:

Safety Class:	Class II
Max. System Voltage:	1500V DC
Construction:	Framed, with Junction box, cable and connector.
Fire Safety Class:	Class C according to UL790

Tested according to:

IEC 61215-1(ed.1)
IEC 61215-1-1(ed.1)
IEC 61215-2(ed.1)
IEC 61730-1(ed.2)
IEC 61730-2(ed.2)
IEC 62716(ed.1)