



Product Service

Attestation of Conformity

No. N8A 107931 0012 Rev. 02

Holder of Certificate: YUHUAN SUNPRO POWER CO.,LTD

Qinggang Technological Ind.Zon,
317606 Yuhuan, Zhejiang Province
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 testing and certification. For details see: www.tuvsud.com/ps-cert

Test report no.: 704062011501-02

Date, 2021-12-02

(Zhulin Zhang)

Page 1 of 2

After preparation of the necessary technical documentation as well as the EU declaration of conformity the required CE marking can be affixed on the product. The declaration of conformity is issued under the sole responsibility of the manufacturer. Other relevant EU-directives have to be observed.



Product Service

Attestation of Conformity

No. N8A 107931 0012 Rev. 02

Model(s):

SPxxx-72M, xxx=370 to 410 in step of 5,
 SPxxx-60M, xxx=305 to 340 in step of 5,
 SPxxx-54M, xxx=280 to 310 in step of 5,
 SPxxx-48M, xxx=245 to 270 in step of 5,
 SPxxx-36M, xxx=185 to 205 in step of 5,
 SPxxx-144M, xxx=410 to 460 in step of 5,
 SPxxx-120M, xxx=340 to 385 in step of 5,
 SPxxx-144MG, xxx=380 to 415 in step of 5,
 SPxxx-120MG, xxx=315 to 345 in step of 5,
 SPxxx-144M10, xxx=520 to 550 in step of 5,
 SPxxx-132M10, xxx=480 to 505 in step of 5,
 SPxxx-120M10, xxx=435 to 460 in step of 5,
 SPxxx-108M10, xxx=390 to 415 in step of 5,
 SPxxx-120M12, xxx=580 to 605 in step of 5,
 SPxxx-110M12, xxx=530 to 555 in step of 5
 xxx is standing for rated output power at STC

Parameters:

Construction:	Framed, with Junction box, Cable and Connectors.
Safety Class:	Class II
Maximum System Voltage:	1500 V DC
Fire Safety Class:	Class C according to UL790.

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



Product Service

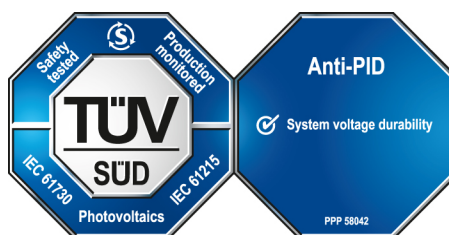
CERTIFICATE

No. Z2 107931 0017 Rev. 01

Holder of Certificate: YUHUAN SUNPRO POWER CO.,LTD

Qinggang Technological Ind.Zon,
317606 Yuhuan, Zhejiang Province
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.: 704062011509-01

Valid until: 2026-11-28

Date, 2021-12-02

(Zhulin Zhang)



CERTIFICATE

No. Z2 107931 0017 Rev. 01

Model(s):

SPxxx-144M, xxx=410 to 460 in step of 5,
 SPxxx-120M, xxx=340 to 385 in step of 5,
 SPxxx-144M10, xxx=520 to 550 in step of 5,
 SPxxx-132M10, xxx=480 to 505 in step of 5,
 SPxxx-120M10, xxx=435 to 460 in step of 5,
 SPxxx-108M10, xxx=390 to 415 in step of 5,
 SPxxx-120M12, xxx=580 to 605 in step of 5,
 SPxxx-110M12, xxx=530 to 555 in step of 5,
 xxx is standing for rated output power at STC

Parameters:

Construction:	Framed, with Junction box, Cable and Connectors.
Safety Class:	Class II
Maximum System Voltage:	1500 V DC
Fire Safety Class:	Class C according to UL790
PID test condition:	-1500 V DC, 85 °C, 85 % RH, 96H
PID testing method is according to IEC TS 62804-1:2015.	

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 58042B:2015



Product Service

CERTIFICATE

No. Z2 107931 0011 Rev. 02

Holder of Certificate: YUHUAN SUNPRO POWER CO.,LTD

Qinggang Technological Ind.Zon,
317606 Yuhuan, Zhejiang Province
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.: 704062011501-02

Valid until: 2026-11-29

Date, 2021-12-02

(Zhulin Zhang)



CERTIFICATE

No. Z2 107931 0011 Rev. 02

Model(s):

SPxxx-72M, xxx=370 to 410 in step of 5,
 SPxxx-60M, xxx=305 to 340 in step of 5,
 SPxxx-54M, xxx=280 to 310 in step of 5,
 SPxxx-48M, xxx=245 to 270 in step of 5,
 SPxxx-36M, xxx=185 to 205 in step of 5,
 SPxxx-144M, xxx=410 to 460 in step of 5,
 SPxxx-120M, xxx=340 to 385 in step of 5,
 SPxxx-144MG, xxx=380 to 415 in step of 5,
 SPxxx-120MG, xxx=315 to 345 in step of 5,
 SPxxx-144M10, xxx=520 to 550 in step of 5,
 SPxxx-132M10, xxx=480 to 505 in step of 5,
 SPxxx-120M10, xxx=435 to 460 in step of 5,
 SPxxx-108M10, xxx=390 to 415 in step of 5,
 SPxxx-120M12, xxx=580 to 605 in step of 5,
 SPxxx-110M12, xxx=530 to 555 in step of 5
 xxx is standing for rated output power at STC

Parameters:

Construction:	Framed, with Junction box, Cable and Connectors.
Safety Class:	Class II
Maximum System Voltage:	1500 V DC
Fire Safety Class:	Class C according to UL790.

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



Product Service

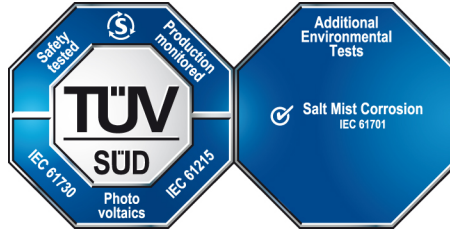
CERTIFICATE

No. Z2 107931 0016 Rev. 01

Holder of Certificate: YUHUAN SUNPRO POWER CO.,LTD

Qinggang Technological Ind.Zon,
317606 Yuhuan, Zhejiang Province
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.: 704062011507-01

Valid until: 2026-11-30

Date, 2021-12-14

(Zhulin Zhang)



CERTIFICATE

No. Z2 107931 0016 Rev. 01

Model(s):

SPxxx-144M, xxx=410 to 460 in step of 5,
 SPxxx-120M, xxx=340 to 385 in step of 5,
 SPxxx-144MG, xxx=380 to 415 in step of 5,
 SPxxx-120MG, xxx=315 to 345 in step of 5,
 SPxxx-144M10, xxx=520 to 550 in step of 5,
 SPxxx-132M10, xxx=480 to 505 in step of 5,
 SPxxx-120M10, xxx=435 to 460 in step of 5,
 SPxxx-108M10, xxx=390 to 415 in step of 5,
 SPxxx-120M12, xxx=580 to 605 in step of 5,
 SPxxx-110M12, xxx=530 to 555 in step of 5,
 xxx is standing for rated output power at STC

Parameters:

Construction:	Framed with Junction box, Cable and Connectors.
Safety Class:	Class II
Maximum System Voltage:	1500V DC
Fire safety Class:	Class C according to UL790
Test method of salt mist :	Test method 6

Tested according to:

IEC 61215-1:2016
 IEC 61215-1-1:2016
 IEC 61215-2:2016
 IEC 61730-1:2016
 IEC 61730-2:2016
 IEC 61701:2020



Product Service

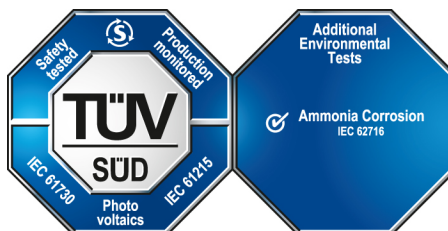
CERTIFICATE

No. Z2 107931 0015 Rev. 01

Holder of Certificate: YUHUAN SUNPRO POWER CO.,LTD

Qinggang Technological Ind.Zon,
317606 Yuhuan, Zhejiang Province
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.: 704062011505-01

Valid until: 2026-11-28

Date, 2021-12-02

(Zhulin Zhang)



CERTIFICATE

No. Z2 107931 0015 Rev. 01

Model(s):

SPxxx-144M, xxx=410 to 460 in step of 5,
 SPxxx-120M, xxx=340 to 385 in step of 5,
 SPxxx-144MG, xxx=380 to 415 in step of 5,
 SPxxx-120MG, xxx=315 to 345 in step of 5,
 SPxxx-144M10, xxx=520 to 550 in step of 5,
 SPxxx-132M10, xxx=480 to 505 in step of 5,
 SPxxx-120M10, xxx=435 to 460 in step of 5,
 SPxxx-108M10, xxx=390 to 415 in step of 5,
 SPxxx-120M12, xxx=580 to 605 in step of 5,
 SPxxx-110M12, xxx=530 to 555 in step of 5,
 xxx is standing for rated output power at STC

Parameters:

Construction:	Framed, with Junction box, Cable and Connectors.
Safety Class:	Class II
Maximum System Voltage:	1500 V DC
Fire Safety Class:	Class C according to UL790.

Tested according to:

IEC 61215-1:2016
 IEC 61215-1-1:2016
 IEC 61215-2:2016
 IEC 61730-1:2016
 IEC 61730-2:2016
 IEC 62716:2013

Warranty conditions for photovoltaic panels V-TAC

1. Limited Warranty

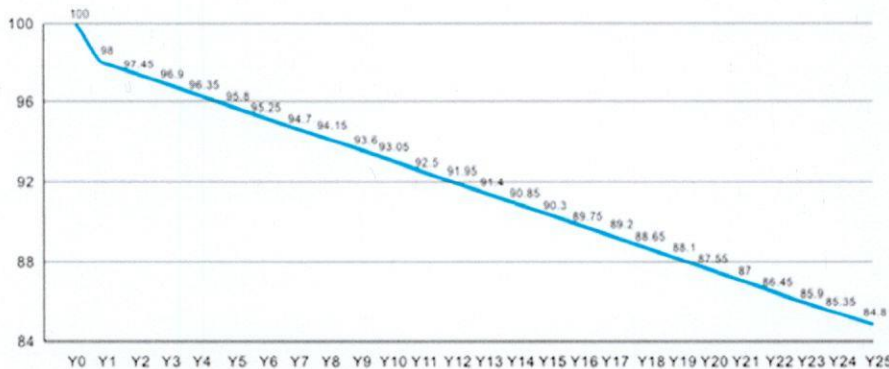
The start date of the solar module warranty set forth in this Solar Module Limited Warranty (hereinafter referred to as the "Limited Warranty") is the date of delivery to the original customer or 6 months after the modules are shipped from the manufacturing plant, whichever is earlier. of the two dates is earlier (hereinafter referred to as the "warranty start date"). For the avoidance of doubt, the aforementioned Initial Customer means the Buyer as agreed in the Sales Agreement for the sale of the Solar Modules.

1.1. 12-year limited product warranty

The supplier warrants that for a period of 12 years from the warranty start date, the solar modules (including DC connectors and cables) will be free from defects in material or workmanship that would affect the normal installation or use of the modules, provided that the solar modules are installed , use and maintain in accordance with the provisions of the installation manual provided by the Supplier, which may be updated periodically. Defects do not include changes in the appearance or normal wear and tear of the solar modules after their installation. The power output performance warranty is not included here, but will be specifically addressed in the "25 Year Limited Performance Warranty" section below.

1.2. 25-year limited performance warranty

The Supplier warrants for a period of 25 years a Performance Guarantee ("Performance Guarantee Period") with details as below: during the first year of the Performance Guarantee Period the actual power output (Performance Characteristics) of the modules will reach at least 98 % of the rated output power; and from the second year, the actual power output will decrease annually by no more than 0.6% for a period of 24 years; until the end of the 25th year, an actual output power of at least 84.8% of the nominal output power is guaranteed.



Actual output power (year=1) ≥ Rated power * (1 - 2%)

Actual Output Power (Year=N, 2≤N≤25) ≥ Rated Power * (1 - (2% + 0.55% *(N-1)))

Actual power output is measured under standard test conditions ("STC" or "standard test conditions") in an independent testing laboratory accepted by the Supplier or pre-specified by the Supplier, and the measurement of the actual power output shall take into account the tolerance of the measuring equipment according to IEC60904.

Standard test conditions are: Air mass 1.5, wind speed 0 m/s, irradiance 1000 W/m², cell temperature 25°C.

1.12.2022

Signature:



Certificate of Factory Production Control

This certificate has been issued to

Zhejiang Sunpro Power Technology Co., Ltd.

of

Qinggang Technological Ind. Zone
Yuhuan
Zhejiang Province
317606
People's Republic of China

whose production management system has been assessed and found to comply with the Factory Production Control Requirements of the MCS Product Certification Scheme in respect of:

Production of Photovoltaic Solar Panels

at the address(s) listed on the Annex of this certificate

and includes the ranges of

Photovoltaic Solar Panels

as detailed on the attached annex to this certificate

Signed: 

on behalf of TUV SUD BABT UNLIMITED

Certificate Number: BAPT 8863 R0

Valid from: 21 July 2023

This Certificate expires on:

20 July 2026



CERTIFIED

The holder of this certificate is authorised to use the MCS Approved Product Mark. This certificate has been issued in accordance with the Testing and Certification Regulations of TÜV SÜD. Conditions of validity of this certificate, if any, are listed in the Annex. This certificate constitutes page 1 of the combined Certificate and Annex.

For further details related to this certification please contact BABT@tuvsud.com

Annex to Factory Production Control Requirement Microgeneration Certification Scheme



1 Manufacturing Location

Facility 1
Zhejiang Sunpro Power Technology Co., Ltd. Qinggang Technological Ind. Zone, Yuhuan, Zhejiang Province, 317606, P.R.China

2 Established Conformity

2.1 Product Certification Scheme Requirements

Microgeneration Certification Scheme	Revision	Applicability
MCS 005 – Solar Photovoltaic Modules	Issue 3.1	<input checked="" type="checkbox"/>
MCS 010 – Factory Production Control Requirements	Issue 2.0	<input checked="" type="checkbox"/>
MCS 012 – Pitched Roof Installation Kits	Issue N/A	<input type="checkbox"/>
MCS 017 – Bespoke Building Integrated Photovoltaic Products	Issue N/A	<input type="checkbox"/>

2.2 Assessment Report

Assessment Report Number	Issue Number	Issue Date
BABT 8863 R0	1	14-07-2023

3 Technical Documentation

3.1 User Guide

PV Modules Installation Manual SP-WI-JS-010	Modified	07/03/2023
PV Modules Installation Manual Bifacial double glass modules SP-WI-JS-010	Modified	31/03/2023

3.2 Test Reports

704062011501-00	Issued	24/12/2020
704062011501-01	Issued	23/08/2021
704062011501-02	Issued	30/11/2021
704062011501-03	Issued	12/10/2022
704062011501-04	Issued	04/04/2023
704062011501-05	Issued	15/05/2023
704062123501-00	Issued	02/06/2021
704062123501-01	Issued	01/09/2021
704062123501-02	Issued	01/04/2022
704062123501-03	Issued	04/06/2023
704062123501-04	Issued	15/05/2023
704062309501-00	Issued	21/04/2023
704062123505-00	Issued	25/10/2021
704062123505-01	Issued	08/08/2022
704062123505-02	Issued	06/04/2023
704062123505-03	Issued	21/04/2023

Annex to Factory Production Control Requirement Microgeneration Certification Scheme



4 Products Within Scope of Certification

4.1 MCS 005: Solar Photovoltaic Modules

Product Type	Product Name ^{Note 1}	Power Range (W) ^{Note 2}	Certification Number
Monocrystalline	SPxxx-72M	370 to 410	BABT8863-101
Monocrystalline	SPxxx-60M	305 to 340	BABT8863-102
Monocrystalline	SPxxx-54M	280 to 310	BABT8863-103
Monocrystalline	SPxxx-48M	245 to 270	BABT8863-104
Monocrystalline	SPxxx-36M	185 to 205	BABT8863-105
Monocrystalline	SPxxx-144MG	380 to 415	BABT8863-106
Monocrystalline	SPxxx-120MG	315 to 345	BABT8863-107
Monocrystalline	SPxxx-144M	410 to 460	BABT8863-108
Monocrystalline	SPxxx-120M	340 to 385	BABT8863-109
Monocrystalline	SPxxx-144M10	520 to 550	BABT8863-110
Monocrystalline	SPxxx-132M10	480 to 505	BABT8863-111
Monocrystalline	SPxxx-120M10	435 to 460	BABT8863-112
Monocrystalline	SPxxx-108M10	390 to 415	BABT8863-113
Monocrystalline	SPxxx-132M12	635 to 670	BABT8863-114
Monocrystalline	SPxxx-120M12	580 to 605	BABT8863-115
Monocrystalline	SPxxx-110M12	530 to 555	BABT8863-116
Monocrystalline	SPxxx-N144M10	545 to 585	BABT8863-117
Monocrystalline	SPxxx-N132M10	510 to 535	BABT8863-118
Monocrystalline	SPxxx-N120M10	455 to 490	BABT8863-119
Monocrystalline	SPxxx-N108M10	410 to 440	BABT8863-120
Monocrystalline	SPDGxxx-144M10	520 to 550	BABT8863-121
Monocrystalline	SPDGxxx-132M10	480 to 505	BABT8863-122
Monocrystalline	SPDGxxx-120M10	435 to 460	BABT8863-123
Monocrystalline	SPDGxxx-108M10	390 to 415	BABT8863-124
Monocrystalline	SPDGxxx-132M12	635 to 670	BABT8863-125
Monocrystalline	SPDGxxx-120M12	580 to 605	BABT8863-126
Monocrystalline	SPDGxxx-110M12	530 to 555	BABT8863-127
Monocrystalline	SPDGxxx-144M	410 to 460	BABT8863-128
Monocrystalline	SPDGxxx-120M	340 to 385	BABT8863-129
Monocrystalline	SPDGxxx-N144M10	545 to 580	BABT8863-130
Monocrystalline	SPDGxxx-N132M10	510 to 530	BABT8863-131
Monocrystalline	SPDGxxx-N120M10	455 to 480	BABT8863-132
Monocrystalline	SPDGxxx-N108M10	410 to 430	BABT8863-133
Monocrystalline	HSGxxx-72M	370 to 410	BABT8863-134

Annex to Factory Production Control Requirement Microgeneration Certification Scheme



Product Type	Product Name ^{Note 1}	Power Range (W) ^{Note 2}	Certification Number
Monocrystalline	HSGxxx-60M	305 to 340	BABT8863-135
Monocrystalline	HSGxxx-54M	280 to 310	BABT8863-136
Monocrystalline	HSGxxx-48M	245 to 270	BABT8863-137
Monocrystalline	HSGxxx-36M	185 to 205	BABT8863-138
Monocrystalline	HSGxxx-144MG	380 to 415	BABT8863-139
Monocrystalline	HSGxxx-120MG	315 to 345	BABT8863-140
Monocrystalline	HSGxxx-144M	410 to 460	BABT8863-141
Monocrystalline	HSGxxx-120M	340 to 385	BABT8863-142
Monocrystalline	HSGxxx-144M10	520 to 550	BABT8863-143
Monocrystalline	HSGxxx-132M10	480 to 505	BABT8863-144
Monocrystalline	HSGxxx-120M10	435 to 460	BABT8863-145
Monocrystalline	HSGxxx-108M10	390 to 415	BABT8863-146
Monocrystalline	HSGxxx-132M12	635 to 670	BABT8863-147
Monocrystalline	HSGxxx-120M12	580 to 605	BABT8863-148
Monocrystalline	HSGxxx-110M12	530 to 555	BABT8863-149
Monocrystalline	HSGxxx-N144M10	545 to 585	BABT8863-150
Monocrystalline	HSGxxx-N132M10	510 to 535	BABT8863-151
Monocrystalline	HSGxxx-N120M10	455 to 490	BABT8863-152
Monocrystalline	HSGxxx-N108M10	410 to 440	BABT8863-153
Monocrystalline	HSGDGxxx-144M10	520 to 550	BABT8863-154
Monocrystalline	HSGDGxxx-132M10	480 to 505	BABT8863-155
Monocrystalline	HSGDGxxx-120M10	435 to 460	BABT8863-156
Monocrystalline	HSGDGxxx-108M10	390 to 415	BABT8863-157
Monocrystalline	HSGDGxxx-132M12	635 to 670	BABT8863-158
Monocrystalline	HSGDGxxx-120M12	580 to 605	BABT8863-159
Monocrystalline	HSGDGxxx-110M12	530 to 555	BABT8863-160
Monocrystalline	HSGDGxxx-144M	410 to 460	BABT8863-161
Monocrystalline	HSGDGxxx-120M	340 to 385	BABT8863-162
Monocrystalline	HSGDGxxx-N144M10	545 to 580	BABT8863-163
Monocrystalline	HSGDGxxx-N132M10	510 to 530	BABT8863-164
Monocrystalline	HSGDGxxx-N120M10	455 to 480	BABT8863-165
Monocrystalline	HSGDGxxx-N108M10	410 to 430	BABT8863-166

Note 1: where xxx = rated output power in Wp @ STC

Note 2: in steps of 5 W

5 Additional Information

All products within the scope of this certification shall be listed on the MCS Installations Database for the duration of this certificates validity. The database shall contain an entry for each individual power rating for the certified product, where the power rating shall be suffixed to the certificate number as listed on this certificate.

6 Conditions of Validity

This certificate authorizes the manufacturer or their authorized representative to apply the MCS Approved Product Mark to the range of products listed within this certification in accordance with the MCS Manufacturers / Distributors agreement dated **5th July 2023**.

This certificate ceases to be valid if the manufacturer makes any changes or modifications to the approved equipment or the approved quality system, which have not been notified to, and agreed with TUV SUD BABT UNLIMITED or a person appointed by TUV SUD BABT UNLIMITED to perform that role.

The manufacturer must immediately cease affixing the MCS Approved Product Mark on any product subject to expiry, withdrawal or suspension of this certification.

Signature: _____ 

Date: _____ 2023-07-21

Print Name: Stephen Milliken

On behalf of TUV SUD BABT UNLIMITED