

**Verantwortlich:**

Paua Solutions GmbH,  
Ackerstraße 29, 10115 Berlin GER  
Geschäftsführer Bastian Faulhaber u. Marc Schuhbauer

ist Hersteller und verantwortlich für:

**Konformitätserklärung / Declaration of Conformity**

Produkt-Typ:	Steckerfertige-Photovoltaik Energieerzeugungsanlage, Paua Air 300
Modell:	300 Wp Plug & Play Solar Komplettsset
Komponenten:	<ul style="list-style-type: none"><li>• 2x eArc (SMF 150M-6X05DB) / 150 Wp / IP-67 / Schutzklasse II</li><li>• 1x Hoymiles HM-300 mit N/A Schutz und eingebauter RCMU / IP67 Schutzart / Schutzklasse II / Input max. 60VDC, Output max. 230VAC, 50-60Hz, 300VA, 1,30A</li><li>• 1x Anschlusskabel vorkonfektioniert mit Betteri Buchse IP67, 5m / 3x2,5mm<sup>2</sup> Leitung / AC Seitig CH-Typ 13 Stecker IP 55</li></ul>

**Konform nach ESTI-Mitteilung 07/2014 und in Übereinstimmung mit der Verordnung über elektrische Niederspannungserzeugnisse (NEV; SR 734.26) (Stand 06.03.2023).**

**Dazu angewandte Normen:**

SMF 150M-6X05DB	DIN EN 61215-1 (VDE 0126-31-1):2017-05; EN 61215-1:2016 DIN EN 61215-1-1 (VDE 0126-31-1-1):2018-06; EN 61215-1-1:2016 DIN EN 61215-2 (VDE 0126-31-2):2019-02; EN 61215-2:2017+AC:2017+AC:2018 DIN EN IEC 61730-1 (VDE 0126-30-1):2018-10; EN IEC 61730-1:2018+AC:2018 DIN EN IEC 61730-2 (VDE 0126-30-2):2018-10; EN IEC 61730-2:2018+AC:2018
Hoymiles HM-300	VDE-ARN-N 4105: 2018-11, VDE V 0124-100:2019 & EN50549-1:2019, VFR 2019 IEC/EN 62109-1:2010/-2:2011, IEC/EN 61000-6-1:2019;EN 61000-6-2:2009; EN 61000-6-3:2007+A1:2011; EN 61000-6-4:2019; EN 61000-3-2:2019; EN 61000-3-3:2013+A1:2019, IEC/EN 62311:2008 NEMA (IP67) Gehäuse; 6000 V Stromstossschutz
Anschlusskabel vorkonfektioniert in 5m	Anschlusskabel 5m H07RN-F, EN 50525-2-21: 2011 Stecker CH Typ 13: IEC 60884-1 (Ed 3.2):2002+A1:2006+A2:2013SN 441011-1: 2019 +Corr2019 SN 441011-2-1:2021
ROHS	Gesamtes Set konform gemäss IEC EN 63000: 2018

Bastian Faulhaber,  
Geschäftsführung  
paua Solutions GmbH

## Technische Daten

Modell	HM-300	HM-350	HM-400
<b>Angaben zum Eingangsstrom (DC)</b>			
Üblicherweise verwendete Modulleistung (W)	240 -405+	280 - 470+	320 - 540+
Einschaltspannung (V)	22		
MPPT-Spannungsbereich (V)	16 - 60		
Maximale Eingangsspannung (V)	60		
Maximaler Eingangsstrom (A)	11,5	11,5	12,5
Maximaler Eingangskurzschlussstrom (A)	1 × 15		
Anzahl MPPTs	1		
Anzahl Eingänge je MPPT	1		
<b>Angaben zum Ausgangsstrom (AC)</b>			
Nennausgangsleistung (VA)	300	350	400
Nennausgangsstrom (A)	1,30	1,52	1,74
Nennausgangsspannung/-bereich (V) <sup>1</sup>	230/180-275		
Nennfrequenz/-bereich (Hz) <sup>1</sup>	50/45 - 55		
Leistungsfaktor (einstellbar)	> 0,99 standardmäßig 0,8 voreilend ... 0,8 nacheilend		
Klirrfaktor	< 3 %		
Maximale Anzahl Module pro Strang <sup>2</sup>	16	14	12
<b>Wirkungsgrad</b>			
CEC-Spitzenwirkungsgrad	96,70 %		
CEC-gewichteter Wirkungsgrad	96,50 %		
MPPT-Nennwirkungsgrad	99,80 %		
Nachtverbrauch (mW)	< 50		
<b>Mechanische Daten</b>			
Umgebungstemperaturbereich (°C)	-40 bis +65		
Abmessungen (B x H x T mm)	182 x 164 x 29,5		
Gewicht (kg)	1,98		
Schutzart	NEMA Außen 6 (IP67)		
Kühlung	Natürliche Konvektion (Keine Lüfter)		
<b>Merkmale</b>			
Kommunikation	2,4 GHz eigene HF (Nordic)		
Überwachung	S-Miles Cloud (Hoymiles-Überwachungsplattform) <sup>3</sup>		
Art der Isolierung	Galvanisch isolierter HF-Transformator		
Konformität	VDE-AR-N 4105: 2018, EN 50549-1: 2019, IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3		

\*1 Nennspannung/-frequenzbereich können je nach örtlichen Anforderungen variieren.

\*2 Die genaue Anzahl der Mikro-Wechselrichter pro Strang entnehmen Sie bitte den örtlichen Anforderungen.

\*3 Hoymiles-Überwachungssystem

# eArc

## SMF150M-6X05DB

# 150 Watt

## 30 Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 2.6 kg, 70% lighter than conventional glass modules.



**Aesthetic:** Seamless integration with underlying installation surface.



**Durable:** eArc is the first glassless module to pass the same durability tests as conventional glass modules, including IEC 61215:2016, IEC61730:2016 and UL1703 (USA). eArc has also passed PID, salt mist and ammonia corrosion tests.

POWER OUTPUT RANGE 150 W

POWER TOLERANCE 0-5 W

**12 Year Product Warranty**

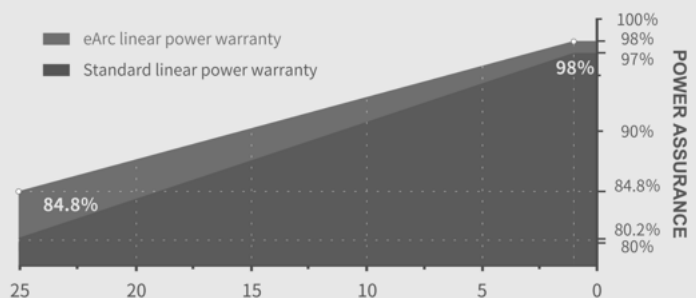
**25 Year Linear Power Warranty**



### LINEAR PERFORMANCE WARRANTY

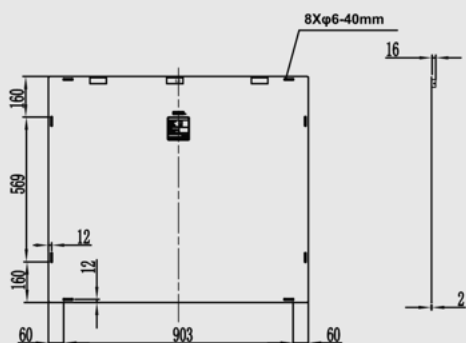
CAUTION: Read installation manual before using the product.

©2021 Sunman (zhenjiang) Co., Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.

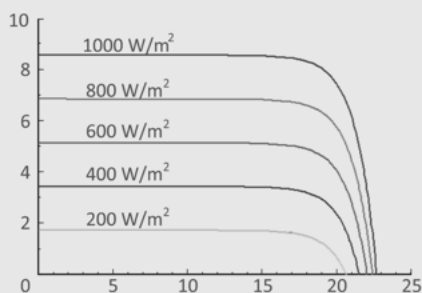


Irrtümer und technische Änderungen vorbehalten.

## DIMENSIONS



## I-V CURVE (150)



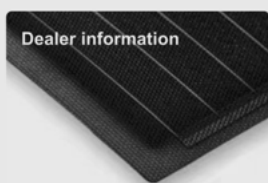
## TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT) **41±2 C**

Temperature Coefficient of  $P_{max}$  **-0.38 %/C**

Temperature Coefficient of  $V_{oc}$  **-0.28 %/C**

Temperature Coefficient of  $I_{sc}$  **0.020 %/C**



SMFDB IEC EN 2023A

## ELECTRICAL CHARACTERISTICS

STC SMF150M-6X05DB

Maximum Power ( $P_{max}$ )	150
Maximum Power Voltage ( $V_{mp}$ )	18.7
Maximum Power Current ( $I_{mp}$ )	8.14
Open-circuit Voltage ( $V_{oc}$ )	22.7
Short-circuit Current ( $I_{sc}$ )	8.54
Module Efficiency (%)	17.6
Operating Temperature	-40 °C to 85 °C
Maximum System Voltage	1000 V DC (IEC)
Maximum Series Fuse Rating	20 A
Application Class	Class A
Power Tolerance	0/+5 W

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25 C, AM=1.5.

Tolerances of  $P_{max}$ ,  $V_{oc}$  and  $I_{sc}$  are within ±5%

NMOT SMF150M-6X05DB

Maximum Power ( $P_{max}$ )	122.7
Maximum Power Voltage ( $V_{mp}$ )	18.9
Maximum Power Current ( $I_{mp}$ )	6.49
Open-circuit Voltage ( $V_{oc}$ )	22.8
Short-circuit Current ( $I_{sc}$ )	6.81

NMOT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20 C, AM=1.5, Wind speed 1 m/s.

## MECHANICAL CHARACTERISTICS

Solar Cell	Monocrystalline silicon (158.75mm)
No. of Cells	30 (6×5)
Module Dimensions	1023×889×2 mm
Weight	2.6kg
Backsheet	Black
Frame	Frameless
J-box	IP 68 rated
Output Cables	Photovoltaic technology cable 4.0 mm 2, (+)450 mm / (-)450 mm
Connector	MC4 compatible

## PACKAGING CONFIGURATION

	20' GP	40' HC
Module per pallet	66+86	66+86
Pieces per container	1216	2736

Irrtümer und technische Änderungen vorbehalten.

# eArc

## SMF150M-6X05DB

# 150 Watt

## 30 Cell Monocrystalline Module



**Ultra-light:** Glass free module weighs 2.6 kg, 70% lighter than conventional glass modules.



**Aesthetic:** Seamless integration with underlying installation surface.



**Durable:** eArc is the first glassless module to pass the same durability tests as conventional glass modules, including IEC 61215:2016, IEC61730:2016 and UL1703 (USA). eArc has also passed PID, salt mist and ammonia corrosion tests.

POWER OUTPUT RANGE	150 W
POWER TOLERANCE	0-5 W

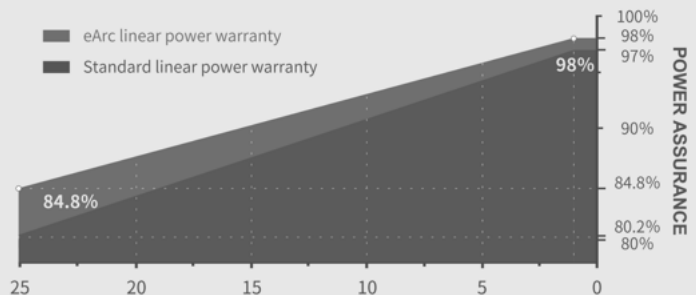
**12 Year Product Warranty**

**25 Year Linear Power Warranty**



### LINEAR PERFORMANCE WARRANTY

CAUTION: Read installation manual before using the product.  
©2021 Sunman (zhenjiang) Co., Ltd. All rights reserved. Specifications included in this datasheet are subject to change without notice.



Irrtümer und technische Änderungen vorbehalten.

# **EU Declaration of Conformity**

Issuer's name and address: Sunman (Zhenjiang) Company Limited  
No.1 Mingzhu South Road  
Youfang Town, Yangzhong City  
212218 Zhenjiang  
Jiangsu  
China

Product: Crystalline silicon terrestrial photovoltaic modules

Type designation:

SMDXXXM-6X12DW	SMDXXXM-6X10DW	SMDXXXM-4X12DW	SMDXXXM-4X09DW	SMBXXXM-6X12DW
SMBXXXM-6X10DW	SMBXXXM-4X12DW	SMBXXXM-4X09DW	SMBXXXM-6X12UW	SMBXXXM-6X10UW
SMBXXXM-4X12UW	SMBXXXM-4X09UW	SMDXXXM-6X12UW	SMDXXXM-6X10UW	SMDXXXM-4X12UW
SMDXXXM-4X09UW	SMFXXXF-6X24DW	SMFXXXF-6X24DB	SMFXXXF-6X20DW	SMFXXXF-6X20DB
SMFXXXF-4X24DW	SMFXXXF-4X24DB	SMFXXXF-4X18DW	SMFXXXF-4X18DB	SMFXXXF-6X24UW
SMFXXXF-6X24UB	SMFXXXF-6X20UW	SMFXXXF-6X20UB	SMFXXXF-4X24UW	SMFXXXF-4X24UB
SMFXXXF-4X18UW	SMFXXXF-4X18UB	SMFXXXM-6X12DW	SMFXXXM-6X10DW	SMFXXXM-4X12DW
SMFXXXM-4X09DW	SMFXXXM-6X12UW	SMFXXXM-6X10UW	SMFXXXM-4X12UW	SMFXXXM-4X09UW
SMFXXXM-5X12UW	SMDXXXF-6X24DW	SMDXXXF-6X24DB	SMDXXXF-6X20DW	SMDXXXF-6X20DB
SMDXXXF-4X24DW	SMDXXXF-4X24DB	SMDXXXF-4X18DW	SMDXXXF-4X18DB	SMDXXXF-6X24UW
SMDXXXF-6X24UB	SMDXXXF-6X20UW	SMDXXXF-6X20UB	SMDXXXF-4X24UW	SMDXXXF-4X24UB
SMDXXXF-4X18UW	SMDXXXF-4X18UB	SMBXXXF-6X24DW	SMBXXXF-6X24DB	SMBXXXF-6X20DW
SMBXXXF-6X20DB	SMBXXXF-4X24DW	SMBXXXF-4X24DB	SMBXXXF-4X18DW	SMBXXXF-4X18DB
SMFXXXF-12X12UW	SMFXXXF-12X12UB	SMFXXXF-12X09UW	SMFXXXF-12X09UB	SMFXXXF-12X08UW
SMFXXXF-12X08UB	SMFXXXF-12X04UW	SMFXXXF-12X04UB	SMFXXXF-12X12DW	SMFXXXF-12X12DB
SMFXXXF-12X08DW	SMFXXXF-12X08DB	SMFXXXF-12X04DW	SMFXXXF-12X04DB	SMFXXXM-6X05DW-e
SMFXXXM-6X05DB-e	SMFXXXM-5X12DW-e	SMFXXXM-5X12DB-e	SMFXXXM-5X07DW-e	SMFXXXM-5X07DB-e
SMFXXXL-12X11UW	SMFXXXL-12X10UW	SMFXXXL-12X09UW	SMFXXXL-10X11UW	SMFXXXL-10X09UW
SMFXXXL-10X08UW	SMFXXXL-8X11UW	SMFXXXL-8X10UW	SMFXXXL-12X07UW-e	SMFXXXL-12X11DW
SMFXXXL-12X10DW	SMFXXXL-12X09DW	SMFXXXL-10X11DW	SMFXXXL-10X09DW	SMFXXXL-10X08DW
SMFXXXL-8X11DW	SMFXXXL-8X10DW	SMFXXXL-12X07DW-e	SMFXXXL-10X07DW-e	SMFXXXL-4X11DW-e
SMFXXXL-4X10DW-e	SMFXXXJ-12X12UW	SMFXXXJ-12X11UW	SMFXXXJ-12X10UW	SMFXXXJ-10X12UW
SMFXXXJ-12X08UW-e	SMFXXXJ-12X12DW	SMFXXXJ-12X11DW	SMFXXXJ-12X10DW	SMFXXXJ-10X12DW
SMFXXXJ-12X08DW-e	SMFXXXJ-10X09DW-e	SMFXXXJ-6X09DW-e	SMFXXXJ-6X08DW-e	SMFXXXJ-6X07DW-e
SMFXXXJ-4X12DW-e	SMFXXXJ-4X11DW-e	SMFXXXJ-6X24UW	SMFXXXJ-6X20UW	SMFXXXJ-5X24UW
SMFXXXJ-6X24DW	SMFXXXJ-6X20DW	SMFXXXJ-5X24DW	SMFXXXF-6X24UW	SMFXXXF-6X24DW
SMFXXXF-6X09DW-e	SMFXXXF-12X12UW	SMFXXXF-12X12DW		

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

**2014/35/EU**

**"Directive of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits".**

The technical documentation and full compliance with the standards listed below proves the conformity of the product with the requirements of the above-mentioned EC Directive:

DIN EN 61215-1(VDE 0126-31-1):2017-05;EN 61215-1:2016  
DIN EN 61215-1-1(VDE 0126-31-1-1):2018-06;EN 61215-1-1:2016  
DIN EN 61215-2(VDE 0126-31-2):2019-02;EN 61215-2:2017+AC:2017+AC:2018  
DIN EN IEC 61730-1(VDE 0126-30-1):2018-10;EN IEC 61730-1:2018+AC:2018  
DIN EN IEC 61730-2(VDE 0126-30-2):2018-10;EN IEC 61730-2:2018+AC:2018  
IEC61215-1:2016  
IEC61215-1-1:2016  
IEC61215-2:2016  
IEC61730-1:2016  
IEC61730-2:2016

*Remark: The VDE Testing and Certification Institute, Merianstr. 28, 63069 Offenbach (Germany), has tested and certified the product according to these standards.*

Certificate No. 40050735  
File Reference 5026242-3972-0001 / 305546

*This declaration is issued under the sole responsibility of the manufacturer.*

2023.4.7



\_\_\_\_\_  
(Place, Date)

\_\_\_\_\_  
(name, function) (signature)



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Federal Inspectorate for Heavy Current Installations ESTI  
Market Surveillance/Safety Mark

**Zhejiang Jinting Nuclear Cable Co. Ltd.**  
**5# Gongji Road Industrial Park**  
**Simen Town**  
**315472 Yuyao, Zhejiang**  
**CHINA**

Client no. 154714	Your reference Jacky Liu	Our reference Peter Wylene	Date 24.05.2022
----------------------	-----------------------------	-------------------------------	--------------------

## Authorization

Number: **22.0321**  
valid until: **31.12.2024**

Marking:



Company Logo

Based on the documents contained in file **22-BS-0168**, the Federal Inspectorate for Heavy Current Installations grants the firm named above the right to put the equipment listed below on the market marked with the Swiss safety mark in accordance with the NEV.

Equipment: **Plug, non-rewirable**

Tradename: **Zhejiang Jinting**

Type designation **Nominal values**

**R3-10F**

250V~ 10A L+N+PE  
CH-type 13, standard sheet 5513-2  
with non-rewirable cords:

H05VV-F 3G 0.75mm <sup>2</sup>	[Zhejiang Jinting]
H05VV-F 3G 1.00mm <sup>2</sup>	[Zhejiang Jinting]
H05VV-F 3G 1.50mm <sup>2</sup>	[Zhejiang Jinting]
H05RN-F 3G 0.75mm <sup>2</sup>	[Zhejiang Jinting]
H05RN-F 3G 1.00mm <sup>2</sup>	[Zhejiang Jinting]
H07RN-F 3G 1.00mm <sup>2</sup>	[Zhejiang Jinting]
H07RN-F 3G 1.50mm <sup>2</sup>	[Zhejiang Jinting]
H07RN8-F 3G 1.00mm <sup>2</sup>	[Zhejiang Jinting]
H07RN8-F 3G 1.50mm <sup>2</sup>	[Zhejiang Jinting]

Federal Inspectorate for Heavy Current Installations ESTI  
Luppenstrasse 1, CH-8320 Fehraltorf  
T +41 58 595 18 18  
mub.bs.info@esti.ch  
www.esti.admin.ch







**Authorization**                      Number: **22.0321**

**Protection class:**                for class I equipment

**Protection degree:**            IP55

**Basis:**                                Test Report / DEKRA / 6127894.51 / 19.05.2022

**Remark:**                            A further extension of the authorization is possible with an updated test certificate

This Authorization replace the authorization with the same number from the 07.04.2022

**Test standards:**                IEC 60884-1(ed.3):02+A1:06+A2:13  
SN 441011-1:19+corr1:19  
SN 441011-2-1:19+corr1:19

Federal Inspectorate for Heavy Current Installations ESTI

Peter Fluri  
Head of Market Surveillance/Safety Mark

