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 600
Modell:	600 Wp Plug & Play Solar Kompletsett
Komponenten:	• 4x eArc (SMF 150M-6X05DB) / 150 Wp / IP-67 / Schutzklasse II • 1x Hoymiles HM-600 mit N/A Schutz und eingebauter RCMU / IP67 Schutzart / Schutzklasse II / Input max. 60VDC, Output max. 230VAC, 50-60Hz, 600VA, 2,55A • 1x Anschlusskabel vorkonfektioniert mit Betteri Buchse IP67, 5m / 3x2,5mm2 Leitung / AC Seitig CH-Typ 13 Stecker IP 55

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-600	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 61000-6-2:200; 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-600	HM-700	HM-800
Angaben zum Eingangsstrom (DC)			
Üblicherweise verwendete Modulleistung (W)	240 to 405+	280 to 470+	320 to 540+
Einschaltspannung (V)		22	
MPPT-Spannungsbereich (V)		16 - 60	
Maximale Eingangsspannung (V)		60	
Maximaler Eingangsstrom (A)	2 x 11,5	2 x 11,5	2 x 12,5
Maximaler Eingangskurzschlussstrom (A)		2 × 15	
Anzahl MPPTs		2	
Anzahl Eingänge je MPPT		1	
Angaben zum Ausgangsstrom (AC)			
Nennausgangsleistung (VA)	600	700	800
Nennausgangsstrom (A)	2,61	3,04	3,48
Nennausgangsspannung/-bereich (V)[1]		230/180-275	
Nennfrequenz/-bereich (Hz)[1]		50/45 - 55 or 60/55–65	
Leistungsfaktor (einstellbar)		> 0,99 standardmäßig 0,8 voreilend ... 0,8 nacheilend	
Klirrfaktor		< 3 %	
Maximale Anzahl Module pro Strang[2]	8	7	6
Wirkungsgrad			
CEC-Spitzenwirkungsgrad		96,70 %	
CEC-gewichteter Wirkungsgrad		96,50 %	
MPPT-Nennwirkungsgrad		99,80 %	
Nachtverbrauch (mW)		< 50	
Mechanische Daten			
Umgebungstemperaturbereich (°C)		-40 bis +65	
Abmessungen (B x H x T mm)		250 x 170 x 28	
Gewicht (kg)		3,0	
Schutzart		NEMA Außen 6 (IP67)	
Kühlung		Natürliche Konvektion (Keine Lüfter)	
Merkmale			
Kommunikation		2,4 GHz eigene HF (Nordic)	
Überwachung		S-Miles Cloud (Hoymiles-Überwachungsplattform)[3]	
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	

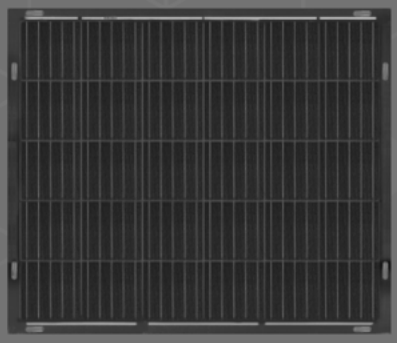
*1 Nennspannung/-frequenzbereich können je nach örtlichen Anforderungen variieren.
*2 Die genaue Anzahl der Mikro-Wechselrichter pro Strang entnehmen Sie bitte den örtlichen Anforderungen.
*3 Hoymiles-Überwachungssystem

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.

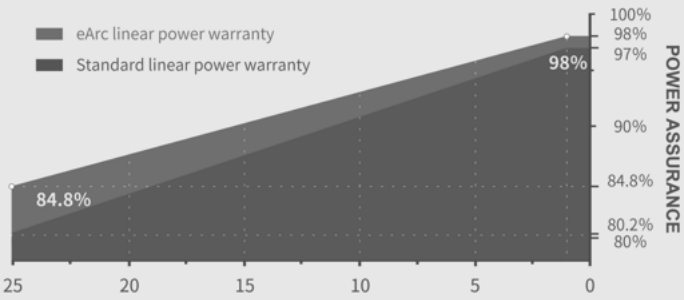
POWER OUTPUT RANGE	150 W
POWER TOLERANCE	0-5 W

12 Year Product Warranty

25 Year Linear Power Warranty

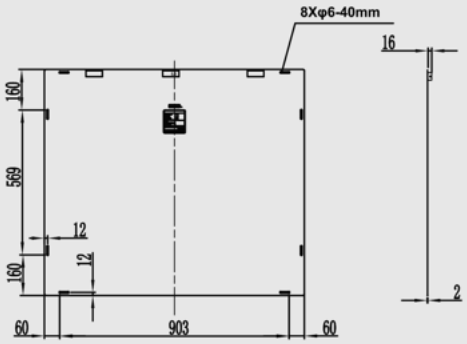
ULTRA-LIGHT&FLEXIBLE SOLAR PANEL

LINEAR PERFORMANCE WARRANTY

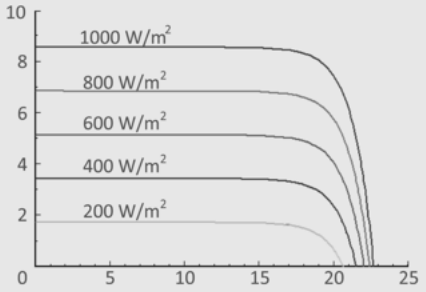


Irrtümer und technische Änderungen vorbehalten.

DIMENSIONS

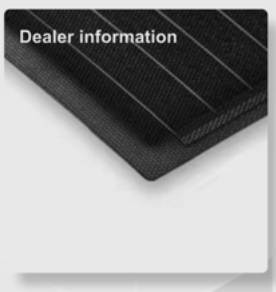


I-V CURVE (150)



TEMPERATURE CHARACTERISTICS

Nominal Module Operating Temperature(NMOT)	41±2 ℃
Temperature Coefficient of P_{max}	-0.38 %/ ℃
Temperature Coefficient of V_{oc}	-0.28 %/ ℃
Temperature Coefficient of I_{sc}	0.020 %/ ℃



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/m², Cell temperature 25℃, 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 2 , Ambient temperature 20℃,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

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
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SMFXXXM-5X12UW SMDXXXF-6X24DW SMDXXXF-6X24DB SMDXXXF-6X20DW SMDXXXF-6X20DB
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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.	Your reference	Our reference	Date
154714	Jacky Liu	Peter Wylenmann	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 0.75mm² [Zhejiang Jinting] H05VV-F 3G 1.00mm² [Zhejiang Jinting] H05VV-F 3G 1.50mm² [Zhejiang Jinting] H05RN-F 3G 0.75mm² [Zhejiang Jinting] H05RN-F 3G 1.00mm² [Zhejiang Jinting] H07RN-F 3G 1.00mm² [Zhejiang Jinting] H07RN-F 3G 1.50mm² [Zhejiang Jinting] H07RN8-F 3G 1.00mm² [Zhejiang Jinting] H07RN8-F 3G 1.50mm² [Zhejiang Jinting]

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Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

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

i. V. H. Stadler

Peter Fluri
Head of Market Surveillance/Safety Mark