

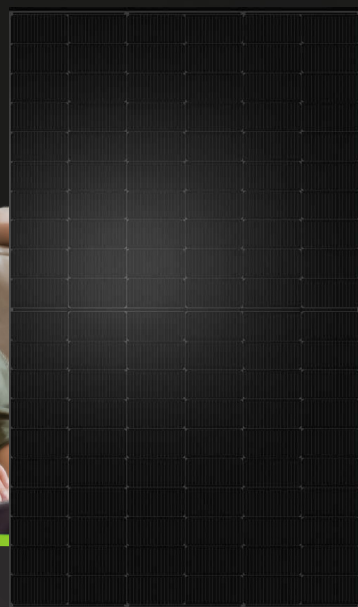
SUNWURX

SWX-500DH8N-120 SERIES

30-YEAR
Warranty

500W
Power

25.52%
Efficiency
BSTC



Smarter Energy.
Better for you.
Better for the Planet.



Reduce
Your Carbon Footprint



Lower
Your Energy Bills



Power
Your Home Your Way

MODEL FEATURES



Sustainable Manufacturing

Produced with reduced environmental impact and long-term lifecycle responsibility.



Better Temperature Coefficient

More consistent performance in summer heat and real-world conditions.



Outstanding Low-Light

Higher yield in cloudy or low irradiance conditions.

ETHICAL MANUFACTURING STANDARDS



EcoVadis Silver: Top 15%

Recognised among the top 15% of manufacturers globally for sustainability, ethics and supply chain governance.



SA8000 Certification

Independently audited social accountability standards across production facilities.



Sedex Member

Full transparency and responsible supply chain practices you can stand behind.

QUALITY MANAGEMENT SYSTEMS AND PRODUCT CERTIFICATION

IEC61215/61730, IEC62804(PID), IEC61701 (Salt),

IEC62716 (Ammonia), IEC60068-2-68 (Sand)

ISO 9001:2015 / quality management system

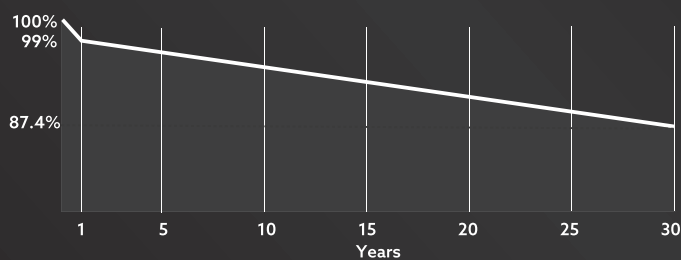
ISO 14001:2015 / environmental management system

ISO 45001:2018 / occupational health & safety management system

ISO 50001:2011 / energy management system

IEC TS 62941 - 2016 / PV industry quality management system

SUNWURX LINEAR PERFORMANCE WARRANTY



EXTENDED POWER OUTPUT WARRANTY

30
YEAR

Limited Product
Warranty

30
YEAR

Performance
Warranty



ELECTRICAL CHARACTERISTICS	STC	BSTC	NOCT
Maximum Power - P _m (W)	500	552.2	378.5
Open Circuit Voltage - V _{oc} (V)	44.22	44.22	42.04
Short Circuit Current - I _{sc} (A)	13.94	15.38	10.97
Maximum Power Voltage - V _m (V)	37.14	37.14	35.77
Maximum Power Current - I _m (A)	13.48	14.87	10.59
Module Efficiency - η (%)	23.10	25.52	

Note: 1. Standard Test Conditions (STC): irradiance 1000 W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
2. Nominal Module Operating Temperature (NOCT): irradiance 800 W/m²; wind speed 1 m/s; ambient temperature 20°C;
3. BSTC: Front side irradiance 1000W/m², back side reflection irradiance 135W/m², AM=1.5, ambient temperature 25 °C
4. Tolerance of P_m: +/-3%, Measuring uncertainty of power: +/-3%. Performance deviation of V_{oc} (V), I_{sc} (A), V_m (V) and I_m (A): +/-3%

MECHANICAL PARAMETERS

Dimensions	1908 x 1134 x 30 mm
Weight	27.2 kg ±4%
Front Glass	2.0 mm High-transmittance, AR Tempered Glass
Rear Glass	Black Grid 2.0 mm Semi-tempered Glass
Frame	Anodized Aluminium Alloy
Cells	N-Type Monocrystalline Cell
Number of Cells	120 [2 x (10x6)]
Junction Box	IP 68 (3 Diodes)
Cable	4 mm ² , 1200 mm or Customised Length
Connector	Staubli MC4 EVO 2A

TEMPERATURE PARAMETERS

NOCT	45°C (±2°C)
Temperature Coefficient of V _{oc}	-0.25%/°C
Temperature Coefficient of I _{sc}	+0.046%/°C
Temperature Coefficient of P _m	-0.30%/°C

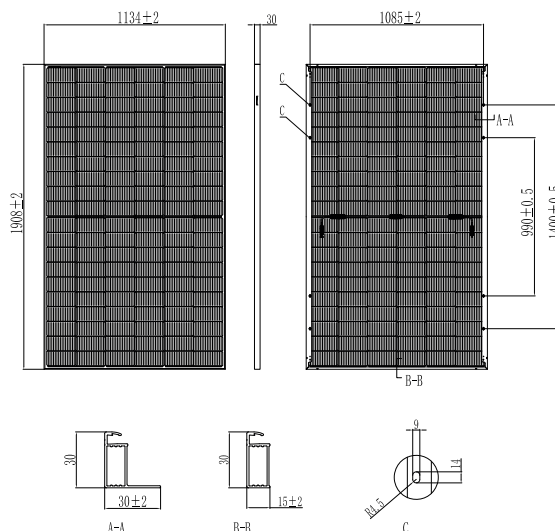
MAXIMUM RATINGS

Maximum System Voltage	1500 V DC (IEC)
Limiting Reverse Current	30 A
Maximum Surface Load Capacity	Front 5400 Pa / Back 2400 Pa
Temperature Range	-40 °C ~ +85 °C
Withstanding Hail	Max. diameter 25 mm with impact speed of 23 m/s
Power Tolerance	-/+3%

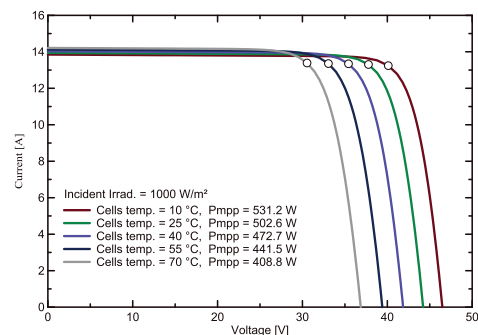
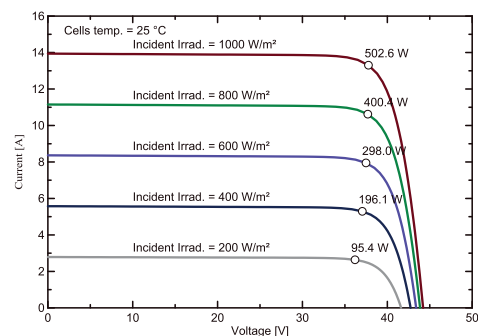
CLAMPING ZONES

Long Side	420 mm to 520 mm from edge
Short Side	150 mm to 250 mm from edge

DRAWINGS



I-V CURVE



PACKAGING CONFIGURATION

Packaging Type	40'HQ
Piece/Pallet	37
Piece/Container	888