

BI-FACIAL MONO PERC HC MODULE

ELITE
PRO+

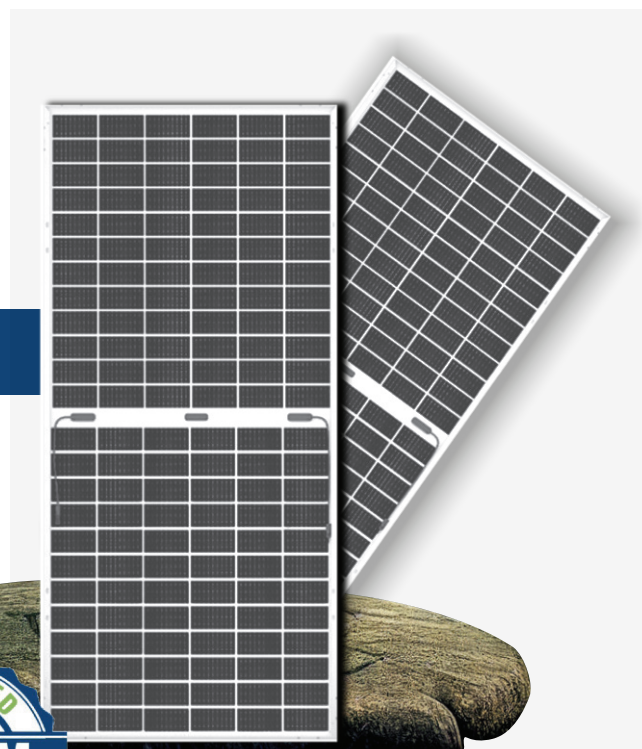
SUN120PXXX(XXX=435-465Wp)



**WARRANTY FOR
MATERIALS AND PROCESSING**



**WARRANTY FOR
LINEAR POWER OUTPUT**



INDUSTRY LEADING PROTECTION



EXCELLENT EFFICIENCY

Excellent module conversion
efficiency of up to 21.03%



LOW-LIGHT PERFORMANCE

Advanced glass and cell surface textured design
ensure excellent performance in low-light environment



HIGH SAVING

Lower LCOE, reduced BOS cost,
shorter payback time



PID RESISTANCE

Excellent Anti-PID Performance guarantee
limited power degradation for mass production



MINIMUM MICRO-CRACK INPUT



POWER GAIN BENEFIT

Up to 30% power gain

BI-FACIAL MODULE

ELITE^{PRO+} (435-465Wp)

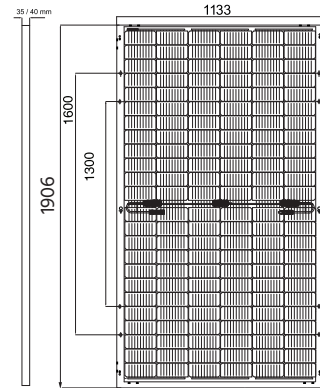
MECHANICAL SPECIFICATION

OPERATING PARAMETERS

DESIGN (MM)

Solar cells	120 monocrystalline Silicon(PERC), Multi BB
Encapsulation	Ultra - clear PID free EVA (Ethylene-Vinyl-Acetate)
Backside	Backsheet
Frame	Silver Anodized Aluminium Alloy
Front Glass	3.2mm, High Transmission, AR Coated T Tempered Glass
Dimensions	(L)1906mm x (w) 1133mm x (H) 40mm
Weight	24.08Kg
J-box	IP 68 certified, 3 diodes, Split junction box
Series Fuse Rating	25 A
Cable	Solar cable 400 mm length
Connectors	MC4 compatible connectors
Application Class	Class A
Electrical Safety	Class II
Fire Safety	Class C (Type 1)
	Snow load 5400 Pa, Wind load 2400 pa

Operational Temperature: -40°C ~ +85°C
Power Output Tolerance: 0 ~ +5 W
Voc and Isc Tolerance: ±3%
Maximum System Voltage: DC1500V (IEC/UL)
Maximum Series Fuse Rating: 25A
Nominal Operating Cell Temperature: 45±2°C
Safety Protection Class: Class II
Fire Rating: UL type 3



Units: mm(inch)
Tolerance:
Length: ±2mm
Width: ±2mm
Height: ±1mm
Pitch-row: ±1mm

ELECTRICAL CHARACTERISTICS

TEST UNCERTAINTY FOR P_{MAX}: ± 3%

Model Number	SUN120PXXX(XXX=435-465Wp)						
Maximum Power (P _{max} /W)	435	440	445	450	455	460	465
Open Circuit Voltage (V _{oc} /V)	41.10	41.20	41.30	41.40	41.50	41.60	41.70
Short Circuit Current (I _{sc} /A)	13.20	13.30	13.42	13.52	13.62	13.72	13.80
Voltage at Maximum Power (V _{mp} /V)	34.77	34.90	35.00	35.12	35.23	35.35	35.45
Current at Maximum Power (I _{mp} /A)	12.52	12.62	12.72	12.83	12.92	13.02	13.12
Module Efficiency (%)	20.14	20.38	20.61	20.84	21.07	21.30	21.53

ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER GAIN

5% Power Gain	Total power - P _{max} (Wp)	457	462	467	473	478	483	488
	Module efficiency (%)	22.61	22.37	22.12	21.88	21.64	21.40	21.15
15% Power Gain	Total power - P _{max} (Wp)	500	506	512	518	523	529	535
	Module efficiency (%)	24.76	24.50	24.23	23.97	23.70	23.44	23.16
25% Power Gain	Total power - P _{max} (Wp)	544	550	556	563	569	575	581
	Module efficiency (%)	26.91	26.63	26.34	26.05	25.76	25.48	25.18

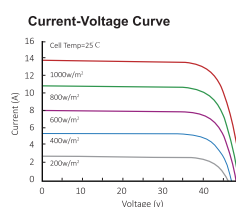
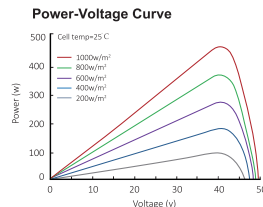
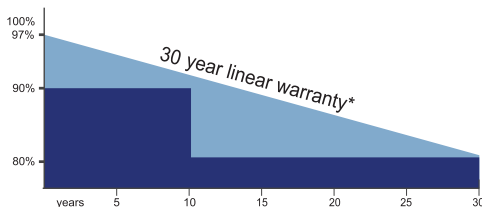
STC (Standard Testing Conditions): Irradiance 1000W/m² Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20 °C, Spectra at AM1.5, Wind at 1m/s

TEMPERATURE RATINGS (STC)

MECHANICAL LOADING

Temperature Coefficient of I _{sc}	+0.022%/C	Front Side Static Loading	5400Pa
Temperature Coefficient of V _{oc}	-0.172%/C	Rear Side Maximum Static Loading	2400Pa
Temperature Coefficient of P _{max}	-0.316%/C	Hailstone Test	25mm Hailstone at the speed of 23m/s



Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IS14286/IEC61853-1/IEC62804-1
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO 27001: Information Security Management System
GMP-Good Manufacturing Practices
ISO 14064: Greenhouse Gases Emissions Verification
OHSAS 18001: Occupational Health and Safety Management System

PRODUCT BY



Office :

OFFICE NO. 365,366, LAXMI ENCLAVE-2, OPP. GAJERA SCHOOL,
KATARGAM, SURAT, GUJARAT - 395004.

Factory :

BL No. 2281/2/1/1, Sub Plot. 1-A, Near Areth Minnor Canal,
Village - Tadkeshwar, Ta - Mandvi, Surat, Gujarat, 394170

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