

BI-FACIAL MONO PERC HC MODULE

ELITE⁺
PRO+

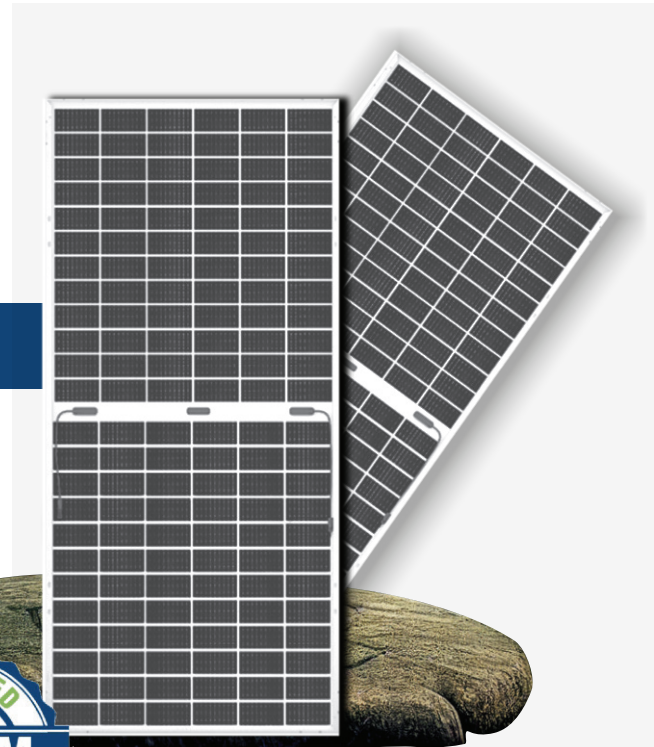
SUN144PXXX(XXX=520-550Wp)



**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+} 520-550

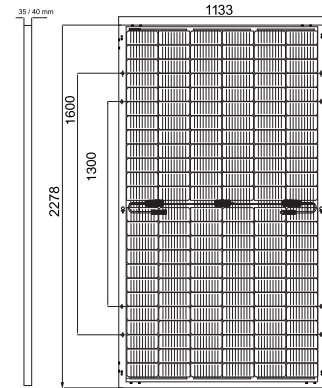
MECHANICAL SPECIFICATION

OPERATING PARAMETERS

DESIGN (MM)

Solar cells	144 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 Empered Glass
Dimensions	(L) 2278 mm x (W) 1133 mm x (H) 35mm
Weight	~28 Kg
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	SUN144PXXX(XXX=520-550Wp)						
Maximum Power (P _{max} /W)	520	525	530	535	540	545	550
Open Circuit Voltage (V _{oc} /V)	49.10	49.20	49.30	49.42	49.51	49.61	49.70
Short Circuit Current (I _{sc} /A)	13.32	13.40	13.50	13.56	13.63	13.73	13.82
Voltage at Maximum Power (V _{mp} /V)	41.30	41.40	41.48	41.56	41.65	41.77	41.88
Current at Maximum Power (I _{mp} /A)	12.60	12.69	12.78	12.88	12.97	13.05	13.14
Module Efficiency (%)	20.18	20.37	20.56	20.76	20.95	21.14	21.34

ELECTRICAL CHARACTERISTICS WITH DIFFERENT POWER GAIN

5% Power Gain	Total power - P _{max} (Wp)	546	551	557	562	567	572	578
	Module efficiency (%)	22.38	22.18	21.98	21.78	21.57	21.37	21.16
15% Power Gain	Total power - P _{max} (Wp)	598	604	610	615	621	627	633
	Module efficiency (%)	24.51	24.29	24.07	23.85	23.62	23.40	23.17
25% Power Gain	Total power - P _{max} (Wp)	650	656	663	669	675	681	688
	Module efficiency (%)	26.64	26.40	26.16	25.93	25.68	25.44	25.19

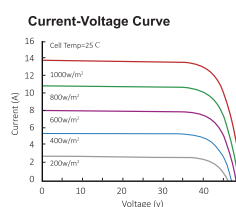
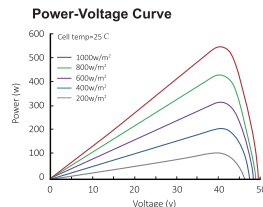
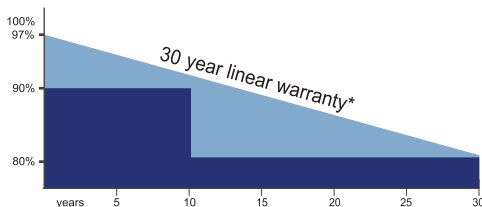
STC (Standard Testing Conditions): Irradiance 1000W/m² Cell Temperature 25 °C, Spectra at AM1.5

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 :

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