



**WARRANTY FOR
MATERIALS AND PROCESSING**



**WARRANTY FOR
LINEAR POWER OUTPUT**

Sunora Solar is committed to providing high-quality solar products in India, and provide world-class performance and mutually beneficial SUNORA SOLAR is a result of Unique Sun Power LLP's effort to increase Customer Values beyond efficiency.

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

ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 Certified Facility

BI-FACIAL MODULE

ELITE PRO+ 520-550

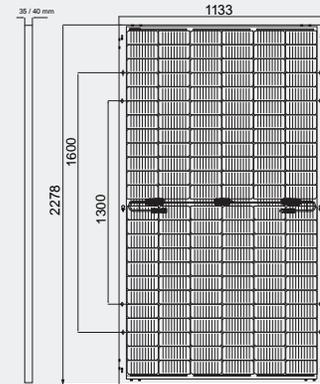
MECHANICAL SPECIFICATION

OPERATING PARAMETERS

DESIGN (MM)

Solar cells	144 monocrystalline Silicon(PERC), Multi BB
Encapsulation	Ultra - clear PID free EVA (Ethylene-Vinyl-Acetate)
Backside	Transferant backsheet
Frame	Silver Anodized Aluminium Alloy
Front Glass	3.2mm, High Transmission, AR Coated Tempered 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: 30A
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 UNCERTANTY FOR P_{MAX}: ± 3%

Model Number	Bi-facial - US10B-144 - (520 WP - 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 DIFFRENT POWER GAIN

5% Power Gain	Total power - P _{max} (Wp)	546	551	556	562	567	572	577
	Module efficiency (%)	21.17	21.35	21.55	21.78	21.98	22.18	22.39
15% Power Gain	Total power - P _{max} (Wp)	598	604	609	615	621	626	632
	Module efficiency (%)	23.19	23.41	23.62	23.84	24.06	24.29	24.51
30% Power Gain	Total power - P _{max} (Wp)	624	631	636	639	648	653	659
	Module efficiency (%)	24.20	24.42	24.63	24.84	25.06	25.29	25.51

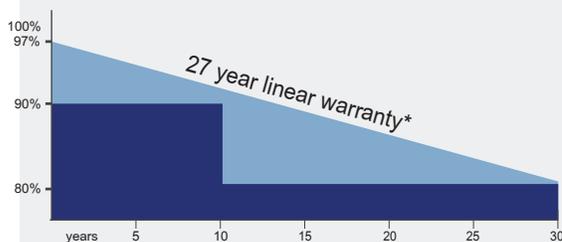
STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 C, Spectra at AM1.5

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

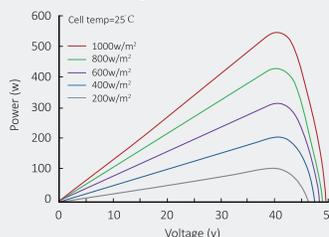
TEMPERATURE RATINGS (STC)

MECHANICAL LOADING

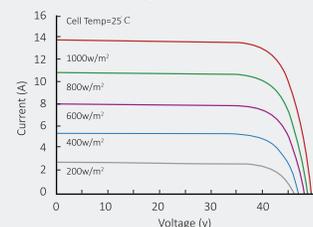
Temperature Coefficient of I _{sc}	+0.050%/ C	Front Side Static Loading	5400Pa
Temperature Coefficient of V _{oc}	-0.284%/ C	Rear Side Maximum Static Loading	2400Pa
Temperature Coefficient of P _{max}	-0.350%/ C	Hailstone Test	25mm Hailstone at the speed of 23m/s



Power-Voltage Curve



Current-Voltage Curve



PRODUCT CERTIFICATIONS

IES 61215: 2016,
IS 14286:2010/IES 61215:2005,
IS/IEC 61730-1 & 2: 2004
UL 61730-1&2, IEC 61701,

PRODUCT BY



**UNIQUE
SUN
POWER**
Reclaim Your Energy



MAKE IN INDIA



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