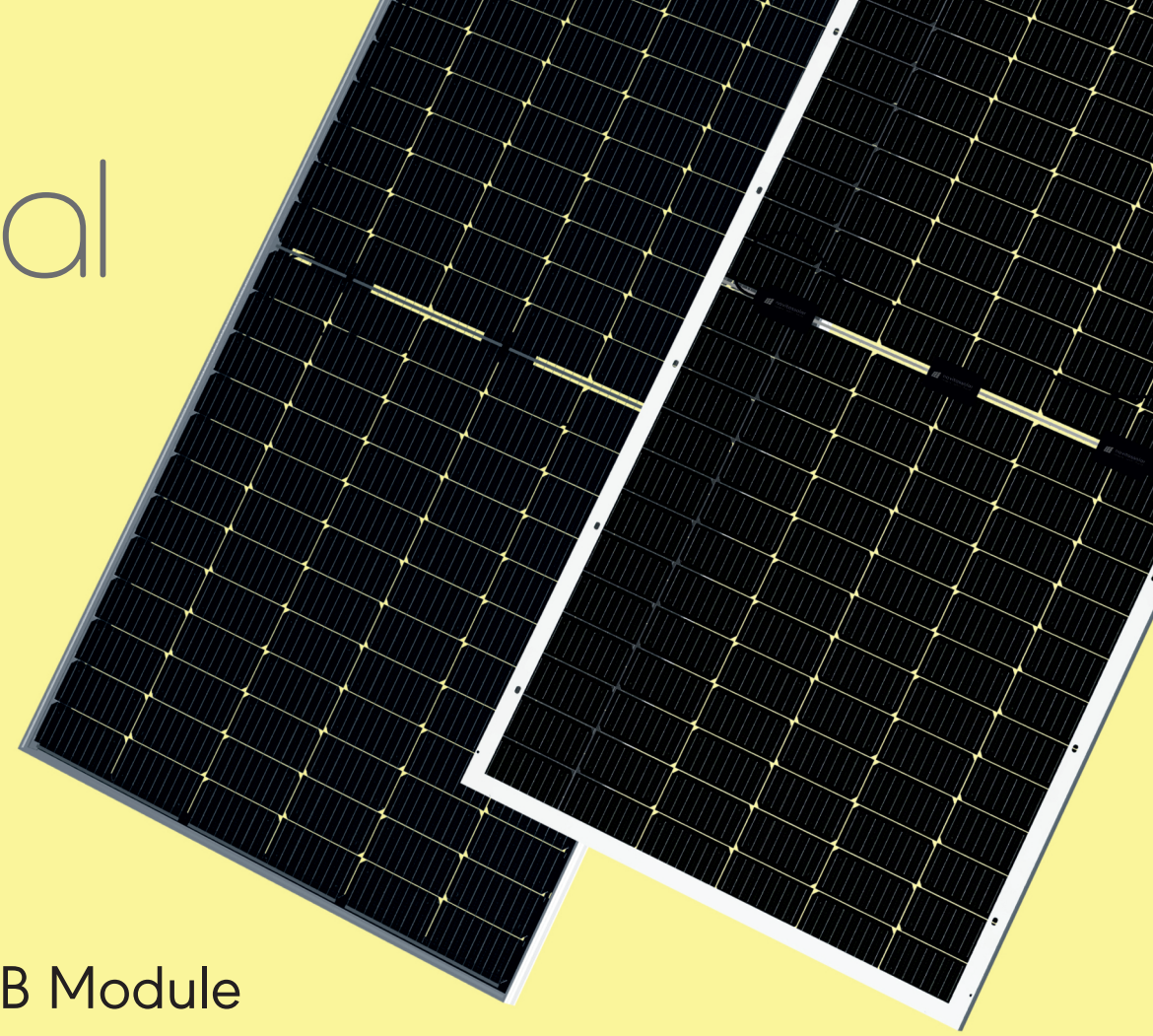
navitas

bifacial



120 Cell I 10 BB Module

Mono PERC Half Cut BIFACIAL Module

NSM 435W to 455W

- Ideal for large scale installations
- More power with Bifacial
- Better shading tolerance
- Lower LCOE & system cost
- Excellent temperature performance
- Non-destructive cutting

Navitas Bifacial modules produces power from the front & backside.

Navitas Bifacial modules can produce up to 30% more power from backside than mono facial modules.

- Module Efficiency up to 21.02%
- Power Tolerance up to 4.99W
- 25 Years Performance Warranty[1]
- 12 Years Product Warranty[1]
- PID Resistant

Product Certifications

UL 61703, ISO 9001, 14001, 45001

www.navitassolar.com

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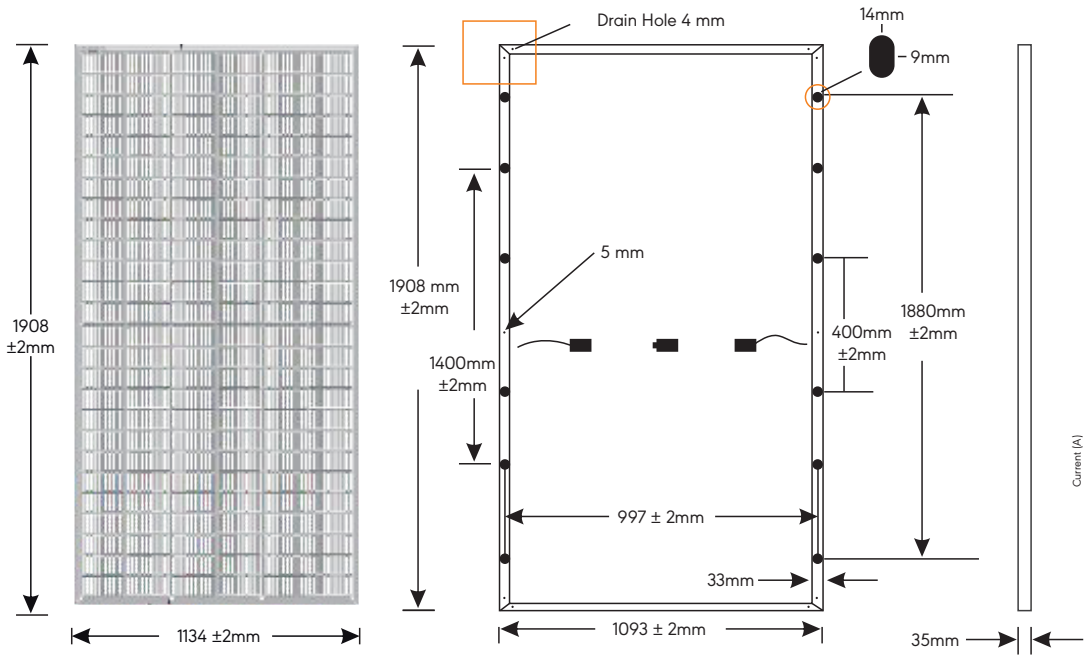
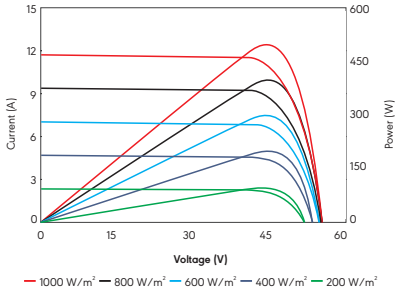
Mechanical Dimensions



All mounting hole 9*14mm-12nos

navitassolar®
conserve | sustain | flourish

I-V Curves of PV Module (for Ref)



Electrical Data

Module Type	NSM435-120		NSM440-120		NSM445-120		NSM450-120		NSM455-120	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Watts (Pmax)	435	327.7	440	331.5	445	335.2	450	339	455	342.8
Maximum Power Voltage (vmp)	34.6	32.11	34.8	32.3	34.98	32.41	35.16	32.53	35.3	32.65
Maximum Power Current (imp)	12.61	10.21	12.69	10.26	12.73	10.34	12.78	10.42	12.88	10.5
Open-circuit voltage (Voc)	40.61	38.17	40.75	38.31	40.88	38.45	41.01	38.59	41.12	38.73
Short-circuit current (isc) (A)	13.27	10.77	13.33	10.82	13.37	10.91	13.41	10.9	13.5	11.07
Module Efficiency STC (%)	20.01		20.33		20.56		20.79		21.02	
Operating Temperature (°C)	-40°C ~ +85°C									
Maximum System Voltage	1500 V DC (IEC)									
Maximum series fuse rating	15A									

Bifacial Output - Backside Power Gain

Module Type	NSM435-120	NSM440-120	NSM445-120	NSM450-120	NSM455-120
10 % Gain	478.5	484.0	489.5	495.0	500.5
15 % Gain	500.3	506.0	511.8	517.5	523.3
20 % Gain	522.0	528.0	534.0	540.0	546.0
25 % Gain	543.8	550.0	556.3	562.5	568.8
30 % Gain	565.5	572.0	578.5	585.0	591.5

STC — Irradiance 1000 W/m² — Cell Temperature 25°C — AM = 1.5

NOCT — Irradiance 800 W/m² — Ambient Temperature 20°C — AM = 1.5 — Wind Speed = 1 m/s

Mechanical Data

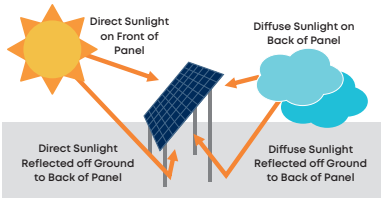
Specification	Data
Cell type	Half cut MONO PERC
Cell arrangement	60 Mono PERC - 120 Half cells
Dimensions	1908*1134*35 MM
Mounting Hole	1400*400/1093
Weight	24.3 Kgs
Front Cover	3.2 mm ARC Glass
Frame Material	Anodozed Aluminium Alloy
Junction Box	IP68 Split JB
cable	4 mm2 (IEC) - Length 0.35 mtr (Potrait)/1.4mtr (Landscape)
Connectors	MC4 Compatible
By-Pass Diodes	3 Pcs
Configuration	Glass to Glass

Temperature Characteristic

Specification	Data
Temperature Co-efficient (Pmax)	-0.36% /°C
Temperature Co-efficient (Voc)	-0.36% /°C
Temperature Co-efficient (Isc)	+0.06% /°C
Nominal Operating Cell Temperature	42 ± 2°C

* The above data is liable to change without prior notice
[1] Warranty applicable as per standard warranty terms as available on www.navitassolar.com

How a BIFACIAL SOLAR PANEL Works



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