

navitas bonito_{pro}



156 Cell | 9 BB Module

Mono PERC Half Cut Module

NSM 460W to 500W



Ideal for large scale installations



High power



Better shading tolerance



Lower LCOE & system cost



Excellent temperature performance



Non-destructive cutting

ALMM
Approved
List by
MNRE*

Module
Efficiency
up to
21.36%

Power
Tolerance
up to
4.99W

25 Years
Performance
Warranty¹

10 Years
Product
Warranty¹

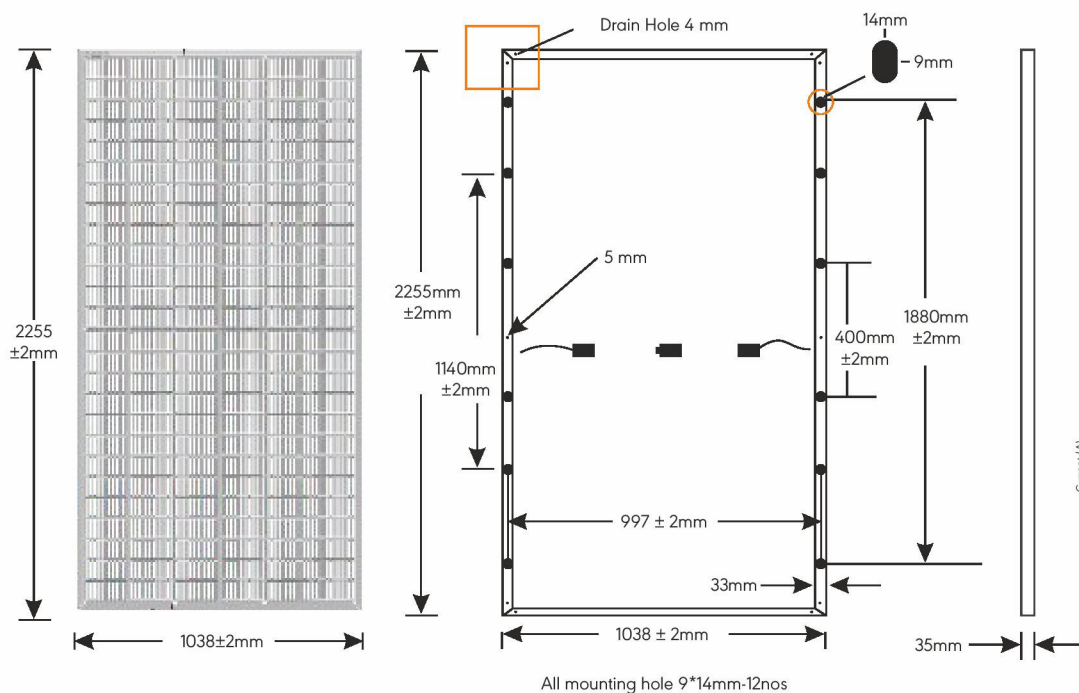
PID
Resistant

Product Certifications

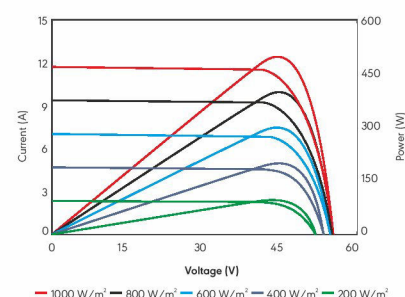
IS 14286*, IS 61730-1 & 2*, IS 62804* IEC 61701*,
Fire Rating *BIS* ISO 9001, 14001, 45001

¹In Process

Mechanical Dimensions



I-V Curves of PV Module (for Ref)



Electrical Data

Module Type	NSM460 - 156		NSM465 - 156		NSM470 - 156		NSM475 - 156		NSM480 - 156		NSM485 - 156		NSM490 - 156		NSM495 - 156		NSM500 - 156	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power Watts (Pmax)	460	342.16	465	345.82	470	349.49	475	353.30	480	357.02	485	360.86	490	364.62	495	368.39	500	372.18
Maximum Power Voltage (Vmp)	44.13	41.43	44.39	41.67	44.65	41.92	44.92	42.17	45.18	42.41	45.45	42.67	45.71	42.91	45.97	43.16	46.24	43.41
Maximum Power Current (Imp)	10.43	8.26	10.48	8.30	10.53	8.34	10.58	8.38	10.63	8.42	10.68	8.46	10.73	8.50	10.78	8.54	10.83	8.57
Open-circuit voltage (Voc)	51.22	48.09	51.59	48.43	51.95	48.77	52.32	49.12	52.69	49.47	53.07	49.82	53.44	50.17	53.80	50.51	54.17	50.85
Short-circuit current (Isc) (A)	11.20	9.05	11.21	9.06	11.22	9.06	11.22	9.07	11.23	9.07	11.23	9.08	11.24	9.08	11.25	9.09	11.25	9.09
Module Efficiency STC (%)	19.65		19.86		20.07		20.29		20.50		20.72		20.93		21.14		21.36	
Operating Temperature (°C)	-40°C ~ +85°C																	
Maximum System Voltage	1500 V DC (IEC)																	
Maximum series fuse rating	20A																	

- ▶ 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

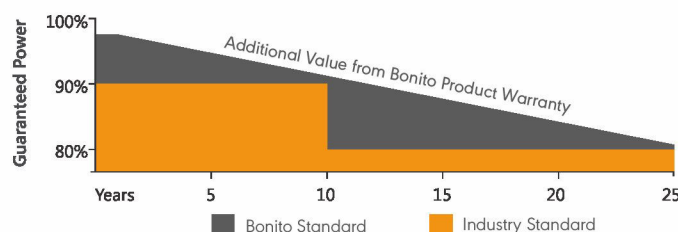
Specification	Data
Cell Type	Half cut Mono PERC
Cell Arrangement	78 Mono PERC - 156 Half Cells
Dimensions	2255x1038x35 mm
Weight	26.5 Kg.
Front Cover	3.2 mm ARC Glass
Frame Material	Anodized Aluminium Alloy
Junction Box	IP68 Split JB
Cable	4 mm ² (IEC) - Length 0.35 mtr (Portrait)/ 1.4mtr (Landscape)
Connectors	MC4 Compatible
By-Pass Diodes	3 Pcs

Temperature Characteristic

Specification	Data
Temperature Co-efficient (P _{max})	-0.36% /°C
Temperature Co-efficient (V _{oc})	-0.36% /°C
Temperature Co-efficient (I _{sc})	+0.06% /°C
Nominal Operating Cell Temperature	42 ± 2°C

Navitas Bonito Performance Warranty

10 Years Product Warranty - 25 Years Linear Power Warranty



Increased Shade Tolerance

HALF-CELL MODULE

Functions like two parallel modules, enabling the **half-cell** string to work in partial shading



* The above data is liable to change without prior notice

¹Warranty applicable as per standard warranty terms as available on www.navitassolar.com