



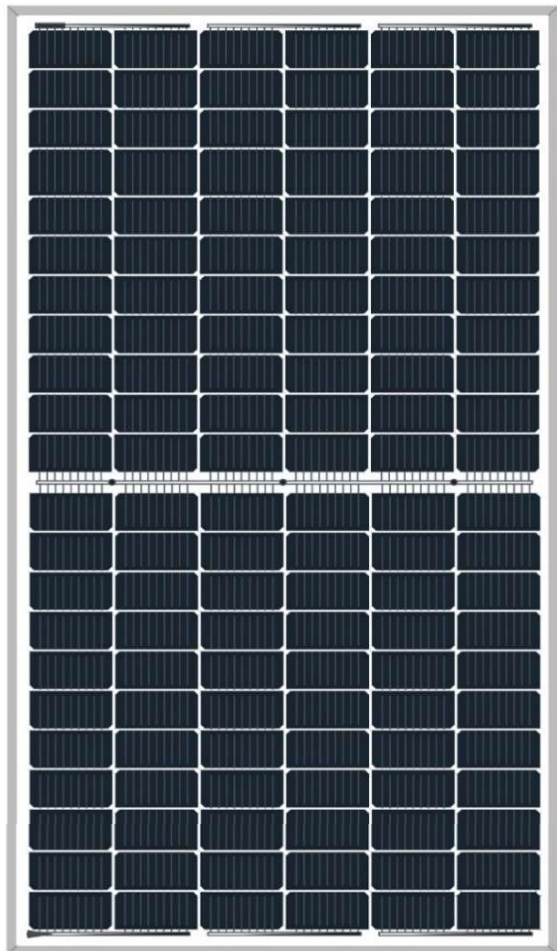
BLACK BUCK Series

'Super High Power 9-Busbar MONO PERC Module'

415 Wp Maximum Power Output	20.46 % Max Module Efficiency	12 Years Material & Workmanship Warranty	30 Years Linear Power Warranty
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N415M132 400 | 405 | 410 | 415

KEY SALIENT FEATURES



Industry leading conversion efficiency



Positive tolerance up to +5W



Passed salt mist & ammonia corrosion blowing sand and hail testing



Certified to withstand wind and snow load



Excellent performance under low light conditions



Good temperature co-efficient enables better output in high temperature regions



Double Stage 100% EL Inspection warranting defect-free Module



Excellent PID resistance



Certified to withstand severe environmental conditions

- Anti-reflective & Anti-soiling surface minimize power loss from dirt and dust.
- Severe salt mist & blown sand resistance for seaside, farm and desert environments.
- Excellent mechanical load 2400Pa & Snow load 5400Pa resistance.



Certifications :



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018



सूक्ष्म, लघु एवं मध्यम उद्यम
Micro, Small & Medium Enterprises

IS 14286:2010/IEC 61215 : 2005
IS/IEC 61730 (Part 1) : 2004
IS / IEC 61730 (Part 1) : 2004



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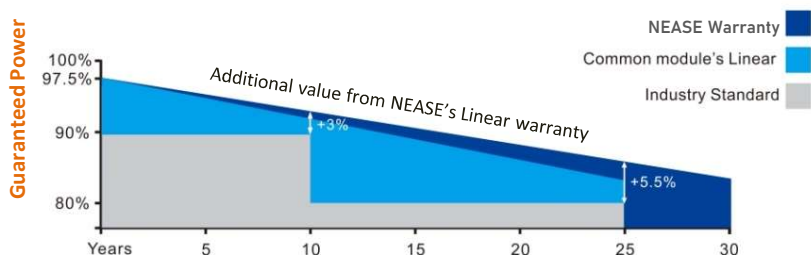
• NEASE established in 2008, is Hi-tech corporation with its core business in R&D manufacturing, and sale of high efficiency silicon based solar modules.

• As one of the leading PV enterprises in the world, NEASE has delivered more than 400MW Solar Photo Voltaic Modules to residential, commercial, utility and off-grid projects all around the world.

• Through strict selection of raw materials, stringent quality control and rigorous test in state of the art facilities in Gandhinagar and Ahmedabad, INDIA. NEASE has always committed to higher efficiency, more stable and better cost performance products.

LINEAR PERFORMANCE WARRANTY

12 years Product Warranty / 30 year Linear Power Warranty



NEASE product warranty is 12 years instead of 10 years given by many competitors.

❖ The loss of output power shall not exceed 0.60% per year.

NEETY EURO-ASIA SOLAR ENERGY

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Electrical characteristics at Standard Test Conditions (STC)

MODEL	N400M132	N405M132	N410M132	N415M132
Maximum Power - Pmax	400	405	410	415
Open Circuit Voltage – Voc (V)	44.76	44.78	44.82	44.88
Short Circuit Current – Isc (A)	11.44	11.46	11.48	11.52
Voltage at Maximum Power – Vmp (V)	37.68	37.70	37.76	37.82
Current at Maximum Power – Imp (A)	10.62	10.75	10.86	10.98
Cell Efficiency (%)	22.20	22.40	22.80	23.00
Module Efficiency (%)	19.72	19.97	20.21	20.46

*Standard Test Conditions(STC) : irradiance 1000W/m² ; cell temperature 25°C, AM 1.5G. The mentioned Power output is measured and determined by NEASE at its sole and absolute discretion

Electrical Characteristics at Nominal Operating Cell Temperature (NOCT)

MODEL	N400M132	N405M132	N410M132	N415M132
Maximum Power - Pmax	304.02	307.80	311.60	315.40
Open Circuit Voltage – Voc (V)	41.68	41.69	41.73	41.79
Short Circuit Current – Isc (A)	9.38	9.40	9.42	9.45
Voltage at Maximum Power – Vmp (V)	35.60	35.63	35.69	35.74
Current at Maximum Power – Imp (A)	8.54	8.63	8.73	8.82

* Nominal Operating Module temperature (NOCT) : irradiance 800W /m²; Wind speed 1 m/s, Ambient temperature 20°C, Module temperature 45°C

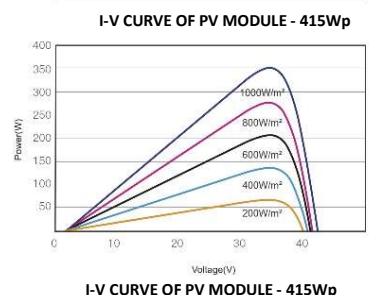
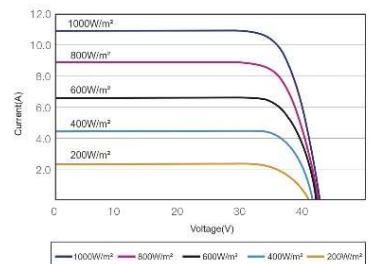
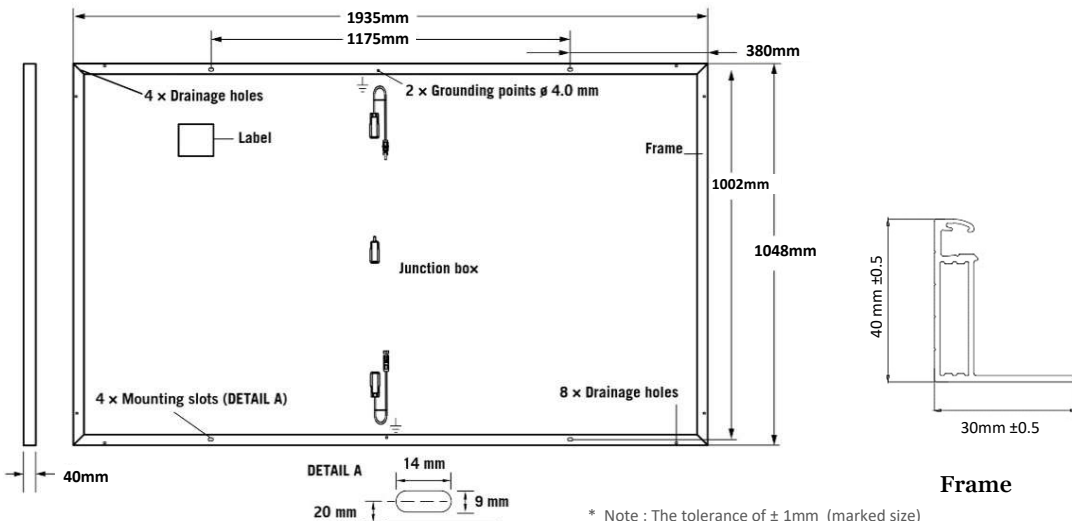
Temperature Characteristics		Maximum Ratings	
Voltage Temperature Coefficient β	- 0.36 %/°C	Maximum system voltage (VDC)	1500 VDC
Current Temperature Coefficient α	+0.07 %/°C	Series fuse rating (A)	25 A
Power Temperature Coefficient γ	-0.38 %/°C	Reverse Current overload (A)	30 A

Mechanical characteristics	
Dimensions (mm)	1935 X 1048 X 40 mm
Weight (Kgs)	21.50 Kgs
Front Glass	High Transmittance , Low Iron toughened Glass – 3.2mm Thickness
Cell Encapsulation	EVA (Ethylene – Vinyl-Acetate)
Back Sheet	Composite Film Tedlar White Back sheet (Optional Transparent Back sheet / Black Back sheet)
Number of Cells	MONO PERC Crystalline Solar Cells 9-BUSBAR, 83 X 166 mm, 132 Cells , (6X11 Matrix – 2 Nos)
Junction Box	IP68, 3 By Pass Diodes, IEC 60529 and Safety Class II
Cable & Connector	2 X 4mm ² , Compatible with MC4, Positive (+)/ Negative (-), Protection IP68
Frame	Silver Mat Anodized aluminum, Alloy Type 6063 T5

SYSTEM DESIGN		PACKING CONFIGURATION	
Temperature Range	-40°C to 85°C	Pieces per Pallet	29 No's
Wind / Snow load Capacity	2400Pa / 5400 Pa	Container 20' GP	348 No's
Application Class	Class A	Container 40' HC	780 No's
Safety Class	Class II	Packaging box dimensions (LXWXH)	2000X1140X1200mm

Note: Please refer the instruction manual in this entirely before handling, installing and operating NEASE Solar Modules.

PHYSICAL CHARACTERISTICS



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MADE IN INDIA