# neety EURO-ASIA SOLAR ENERGY (A Group of neety international)

**Turning Solar Technology Into Practical Solutions.** 

# 144 CELLS SERIES



'High Efficiency

Poly Crystalline Module'

350Wp Maximum Power Output 17.30% Max Module Efficiency 12 Years
Material &Workmanship
Warranty

25 Years Linear Power Warranty

N350P144 - 330 | 335 | 340 | 345 | 350

# **KEY SALIENT FEATURES**





Industry leading conversion efficiency



Positive tolerance upto +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** 



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

IS / IEC 61730 (Part 1): 2004

Certified to withstand severe environmental conditions

- Anti-reflective 7anti-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.

#### 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.

**Certifications:** 

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

- 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**

( 90% for 12 years, 80% for 25 years )



NEASE product warranty is 12 years longer than many competitor's standard 10 years and covers 25 years.

#### NEETY EURO-ASIA SOLAR ENERGY

E-153, GIDC, Electronics Estate, Sector - 26, Gandhinagar - 382028. Gujarat. India . Email: info@nease.in & neetyintl@gmail.com

❖The loss of output power shall not exceed 0.70% per year.

# **Electrical characteristics at Standard Test Conditions (STC)**

MODEL	N330P144	N335P144	N340P144	N345P144	N350P144
Maximum Power - Pmax	330	335	340	345	350
Open Circuit Voltage – Voc (V)	46.38	46.42	46.48	46.52	46.79
Short Circuit Current – Isc (A)	9.20	9.24	9.30	9.36	9.41
Voltage at Maximum Power – Vmp (V)	37.96	38.02	38.06	38.24	38.45
Current at Maximum Power – Imp (A)	8.70	8.82	8.94	9.02	9.10
Module Efficiency (%)	16.31	16.55	16.80	17.05	17.30

<sup>\*</sup>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	N330P144	N335P144	N340P144	N345P144	N350P144
Maximum Power - Pmax	246	251	258	262	268
Open Circuit Voltage – Voc (V)	43.22	43.49	43.71	43.86	43.94
Short Circuit Current – Isc (A)	7.44	7.51	7.63	7.74	7.82
Voltage at Maximum Power – Vmp (V)	35.18	35.38	35.58	35.66	35.73
Current at Maximum Power – Imp (A)	7.00	7.09	7.25	7.34	7.50

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

Temperature Characteristics		Maximum Ratings	
Voltage Temperature Coefficient Voc β	-0.0451%/°C	Maximum system voltage (V)	1500V
Current Temperature Coefficient $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	0.3045%/°C	Series fuse rating (A)	15 A
Power Temperature Coefficient Pmax y	-0.361%/°C	Reverse Current overload (A)	20 A

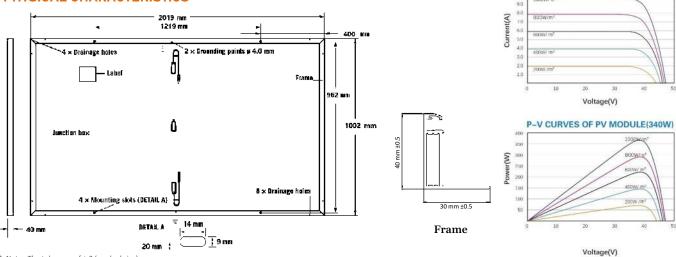
## Mechanical characteristics

Dimensions (mm)	2019 X 1002 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 PVF
Number of Cells	High Efficiency Poly Crystalline Solar Cells 5BB (144 Cells ) - 6X12 Series - 2 Nos
Junction Box	IP68 3 By pass Diodes, IEC 60529 and safety class II
Cable & Connector	2 X 4mm², Compatible with MC4, Positive (+) 400mm / Negative 400mm
Frame	Silver Mat Anodized aluminum, Alloy Type 6063 T5

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

# I-V CURVES OF PV MODULE(340W)

# PHYSICAL CHARACTERISTICS



*	Note:	The	tolerance	of ±	2	(marked	size)

System Design		Packaging			
Temperature Range	- 40°C to + 85°C	Dimensions (LXWXH)	2040X1140X1137 mm		
Wind / Snow load Capacity	2500Pa / 5400 Pa	Container 20'	260 Nos		
Application Class	Class A	Container 40'	480 Nos		
Safety Class	Class II	Container 40' HC	572 Nos		

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