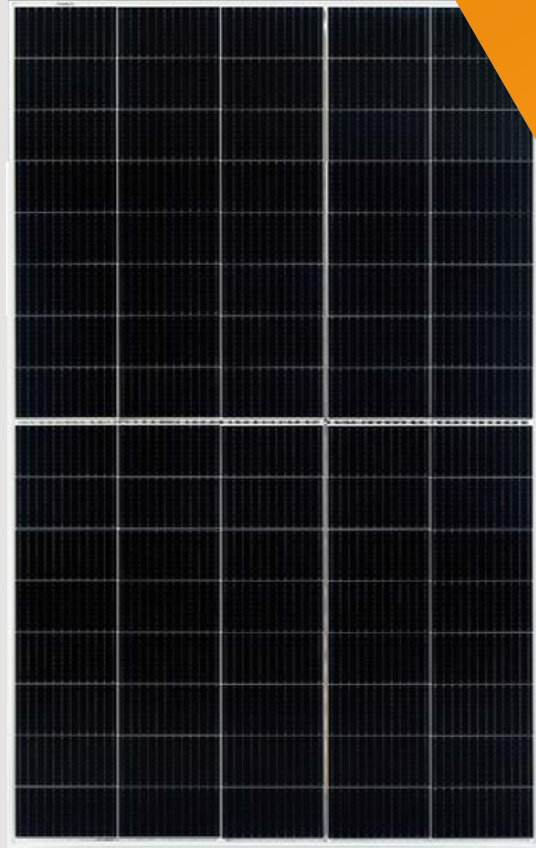




# NPV80-9-415BN

- **80 CELL**  
Mono TOPCON Module
- **1500VDC**  
Maximum System Voltage
- **405-420Wp**  
Power Output Range
- **21.8%**  
Maximum Efficiency



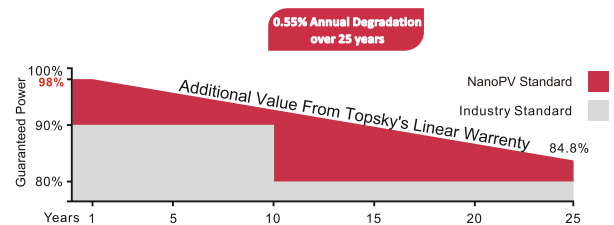
## KEY SALIENT FEATURES

- Global, bankable brand, with independently certified state-of-the-art automated manufacturing
- Industry leading lowest thermal co-efficient of power
- Industry leading 12 years product warranty
- Excellent low irradiance performance
- Excellent PID resistance
- Positive power tolerance of 0~+3%
- Dual stage 100% EL Inspection warranting defect-free product
- Module Imp binning radically reduces string mismatch losses
- Excellent wind load 2400Pa & snow load 5400Pa under certain installation method
- Comprehensive product and system certification
  - ◆ IEC61215:2016; IEC61730-1/-2:2016;
  - ◆ ISO 9001:2015 Quality Management System
  - ◆ ISO 14001:2015 Environmental Management System
  - ◆ ISO 45001:2018 Occupational Health and Safety Management System

## HIGH PERFORMANCE N-TYPE TOPCON MONOCRYSTALLINE MODULE

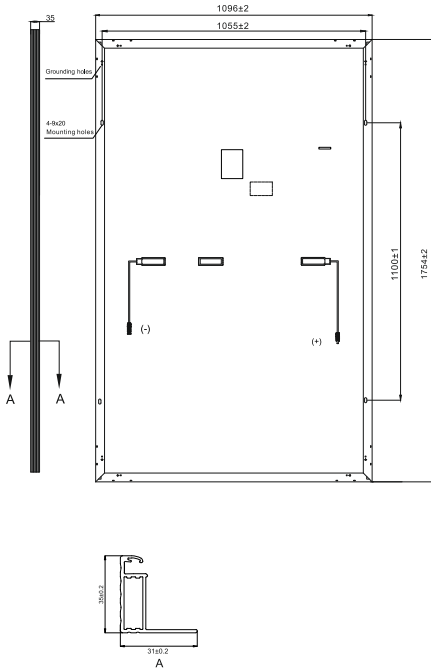
## LINEAR PERFORMANCE WARRANTY

12 year Product Warranty / 25 year Linear Power Warranty



★ Please check the valid version of Limited Product Warranty which is officially released by NanoPV

## Dimensions of PV Module Unit: mm



## ELECTRICAL DATA (STC)

Model Number	NPV80-9-405BN	NPV80-9-410BN	NPV80-9-415BN	NPV80-9-420BN
Rated Power in Watts-Pmax(Wp)	<b>405</b>	<b>410</b>	<b>415</b>	<b>420</b>
Open Circuit Voltage-Voc(V)	28.82	28.93	29.05	29.16
Short Circuit Current-Isc(A)	17.97	18.08	18.20	18.31
Maximum Power Voltage-Vmpp(V)	23.86	23.99	24.12	24.25
Maximum Power Current-Imp(A)	16.97	17.08	17.20	17.33
Module Efficiency (%) *	21.1	21.3	21.6	21.8

STC: Irradiance 1000 W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5 according to EN 60904-3.

\* Module Efficiency (%): Round-off to the nearest number

## ELECTRICAL DATA (NMOT)

Model Number	NPV80-9-405BN	NPV80-9-410BN	NPV80-9-415BN	NPV80-9-420BN
Rated Power in Watts-Pmax(Wp)	<b>306.5</b>	<b>310.2</b>	<b>314.1</b>	<b>318.2</b>
Open Circuit Voltage-Voc(V)	26.80	26.91	27.02	27.12
Short Circuit Current-Isc(A)	14.74	14.83	14.93	15.02
Maximum Power Voltage-Vmpp(V)	22.14	22.26	22.38	22.50
Maximum Power Current-Imp(A)	13.84	13.93	14.03	14.14

NMOT: Irradiance at 800 W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1 m/s.

## MECHANICAL DATA

Solar cells	Monocrystalline
Cell configuration	80cells (5×8+5×8)
Module dimensions	1754×1096×35mm
Weight	21kg
Superstrate	High Transmission, Low Iron, Tempered ARC Glass
Substrate	White Back-sheet
Frame	Anodized Aluminium Alloy, Silver Color
J-Box	Potted, IP68, 1500VDC, 3 Schottky bypass diodes
Cables	4.0mm <sup>2</sup> , Positive(+)+350mm, Negative(-)-230mm (Connector Included)
Connector	IP68

## TEMPERATURE & MAXIMUM RATINGS

Nominal Module Operating Temperature (NMOT)	44°C±2°C
Temperature Coefficient of Voc	-0.25%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.34%/°C
Operational Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Max Series Fuse Rating	30A
Limiting Reverse Current	30A

## PACKAGING CONFIGURATION

	40ft(HQ)	20ft
Number of modules per container	806	182
Number of modules per pallet	31	31
Number of pallets per container	26	6
Packaging box dimensions (LxWxH) in mm	1770×1120×1236	1770×1120×1236
Box gross weight[kg]	692	692

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.

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No special undertaking or warranty for the suitability of special purpose or being installed in extraordinary surroundings is granted unless as otherwise specifically committed by manufacturer in contract document.

### Contact US:

**NanoPV Solar Inc.,**  
103 Carnegie Center Dr.,  
Princeton,  
New Jersey - 08540,  
USA.

**Email:** info@nano-pv.com

**Website:** www.nano-pv.com

